

NEW WORLDS SCIENCE FICTION

No. 46

2/-



NEW WORLDS

— PROFILES —

LAN WRIGHT

Whose first novel begins serialisation in this issue has always felt that the main theme of science fiction will centre on good quality space stories. "Every science fiction writer," he says, "has at some time or other written about a human-dominated Galaxy, but to my knowledge, no-one has ever tried to picture the actual overall accomplishment of that domination. It is a vast, fascinating theme and it filled most of a seven week period when I was laid up with pneumonia. Whether I have done full justice to it is left for the reader to decide. This story is also one good example of the co-operation and assistance afforded by the editor of *New Worlds* — John Carnell's guiding hand is strong in the background."



THEODORE STURGEON

One of America's foremost fantasy short story writers and author of the 1954 International Fantasy award for his outstanding novel *More Than Human*. A native New Yorker he has had a variety of jobs from truck driving to Copy Chief of the Advertising Division of a large electronics corporation but now prefers to live on a caravan site in up-state New York in comparative rural seclusion. Most of his books will shortly be available in British editions and his first novel *The Dreaming Jewels* is still available in the Nova Novels series.

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Cover painting from "Who Speaks Of Conquest."

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S-f-Hollywood Version...

Since 1948 when science fiction, at least as a name, became almost a household word in the United States (and subsequently in Britain—just check the amount of advertising that has used spaceships as an identifying mark of the future) I have been wondering which entertainment medium would win the commercial game of leap-frog that materialised so suddenly.

Prior to 1948 science fiction had carved a reasonably comfortable niche for itself in the magazine field. There was room for a gradual expansion with slowly increasing sales figures and an occasional new magazine appearing. The hundreds of thousands of regular readers round the world were staunch supporters, if often highly critical, but quite prepared to follow the differing trends of the various publishers. After all, there was no other medium offering regular science fiction at that time. But 1948 saw the first of the small specialised hard cover publishing houses come into being in U.S.A.—still catering primarily to the regular reader—and suddenly, from that small beginning, the larger publishing houses became interested. While the prominent publishers could at best only expect to sell to thousands we were suddenly regaled with the vista that science fiction might possibly move out of the realm of the pulp magazine and become an accepted literature.

But the prominence given at that time to the *genre* plus the increasing possibilities of space stations, mechanical satellites, and the increasing power of the atom, suddenly rocketed the magic words into virtually world-wide prominence. Advertising men got to work thinking up new superlatives for cookies, crackers, corn flakes, corn-on-the-cob, coffeepots and cheesecake, quickly pushing science fiction into the medium of television and radio. Now the audience could be numbered in the millions and it is just about here that we can squarely lay the blame for the odious name science fiction acquired in recent years, for as the medium reached out to the mass market so the quality sank lower and lower, producers and script writers apparently working on the wartime assumption that "the speed of any convoy is that of the slowest ship," or, in their language, "the mentality of the average human being is that of the lowest moron."

Now, at the beginning of 1956, we are about to enter yet another phase of the struggle to blind the multitude with pseudo-science (please note the difference!) The latest invasion on our minds and pockets comes, naturally, from Hollywood, last on the bandwagon

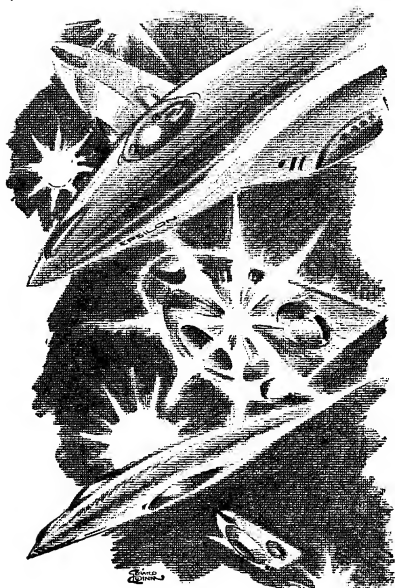
but determined to be in at the death, for which they will probably be responsible. Movie moguls were at first cautious about venturing into the field of science fiction—in general it didn't lend itself very well for location shots in the Rockies or the Mojave Desert—only the fact that the semi-documentary *Destination Moon* grossed a million dollars at the box office prompted them to believe there *might* be something in this Thing called Science Fiction. And with typical Hollywood thoroughness they have proceeded to alter the basic tenets of the *genre* to conform to their preconceived ideas of what it *should* be like.

In general the emphasis will be on *Horror*. Space flight doesn't fake up too well, even Paramount's *Conquest Of Space* last year showed the inadequacies of animation and model-photography; so we can be prepared for alien invasions and monsters stalking the Earth, rather than the possibilities of reaching the Moon or Mars. As a good example of what is in store for us I have just seen the trade show of a double-feature horror programme publicised in letters a foot high as science fiction. "Day The World Ended" and its nauseating companion "The Phantom From 10,000 Leagues" are a duo of puerile rubbish it will be difficult to live down in a decade. I do the players in each a service by not mentioning their names. The broadsheet handed to me at the theatre, overflowing with superlatives and adjectives, informs that these two films broke all records in Detroit's largest cinema with a seating capacity of 5000! *No comment!*

Already released and showing in London at the moment is "Tarantula" in similar vein to the foregoing rubbish and the film version of George Orwell's 1984 which relies upon horror and sadism to hold its audience. It was rather unfortunate that when the book first appeared in U.S.A. reviewers were prompted to label it as "political science fiction." It was doubtless this type of book which prompted J. B. Priestley to classify science fiction in general as being brutal in outlook.

Meanwhile, with the up-surge of fifth-rate films (and there are plenty more to come) book publishing in the States dwindles. During 1955 only thirty science fiction books were produced of which ten were anthologies, and not more than half a dozen of the new novels are worth considering for the 1956 International Fantasy Award. Logically, there will be fewer titles published in Great Britain during this year. Whether the Hollywood brand of science fiction has anything to do with this decrease in book publishing is problematical but it is safe to predict that they will effectively curtail the improvement of the genuine product for many years to come.

John Carnell.



To date all our published serials have been popular but some readers have put forward the minor complaint that we have never had one which really deals with the Galaxy. Those of you who are now enjoying the E. E. Smith "Lensman" series being published by T. V. Boardman Ltd. will delight in Lan Wright's offering herewith, which is in the tradition of "Doc" Smith with the vast sweep of the Galaxy as a background to Man's first interstellar adventures.

WHO SPEAKS OF CONQUEST ?

By Lan Wright

Illustrated by QUINN

Part One of Four Parts

I.

The greatness of a civilisation is judged not only by its size but also by its ability to survive.

The successive rise and decline of the ancient Terran empires and civilisations are perfect illustrations of this point, for while their sizes were generally great in relation to their known environment, their eras of power were generally short. But each of them contributed something to the whole, and Mankind itself struggled up over the crumbling remains that were left by successive constituent states.

The civilisation of the Human Race had long proved its ability to survive even the most crushing local disasters caused by independent nations before judgment of its greatness could be gauged by its size.

There was another Empire, one which had survived a million years. It was an empire founded on ambition, upheld by power, and maintained by over-burdened necessity. It had proved its ability to survive by virtue of a million years of undisputed rule, and its size was the size of the Galaxy.

The first Terran Interstellar Expedition, under the leadership of Commander Stephen Brady, United Terran Space Fleet, landed on the fifth planet of the star Sirius on July 8th, 2223 Solar date time, and found a reception committee awaiting its arrival.

The flight was made three years after the initial discovery of the Stellar Drive, and it is safe to record that whatever else the expedition anticipated finding the last place on the list was filled by a reception committee.

Exactly four months after their landing on Sirius Five the five ships of the expedition flickered out of stellar drive some twenty-five thousand miles from the Earth and completed their journey on the flaming jets of rockets which had not yet been rendered obsolete by their mighty successor, the Drive. In three hours they grounded at White Sands Spaceport.

Partly because of the inaccessibility of White Sands and partly because of official restrictions, the return of the expedition was comparatively quiet. Apart from spaceport officials and the Earthbound members of the great Sirius Project, there were no great welcoming crowds, and inside ten minutes of his ship landing Commander Brady was in the office of General Drummond, the Chief Security Officer of the Stellar Exploration Commission.

Brady was a thickset man of slightly over medium height, his normally deep tanned face now a somewhat pasty white after his long spell away from normal sunlight. It was a pallor which was to become the recognised mark of the deep space man, a pallor which even sunray treatment could not entirely eliminate. His hair was dark and wavy, but not, thought Drummond, as dark as it had been when he left on his mission, and there were tired patches under his eyes, eyes which were deep blue and had a piercing, far off glint in them, a glint which was also to become the mark of the deep space man.

All this Drummond took in at a glance as he shook hands with Brady, and said with embarrassed inadequacy, "Glad to see you back, Commander."

Brady smiled in return, "You mean you're surprised to see us back."

Drummond waved him to a seat and sat down himself before replying. "Frankly, yes. I for one didn't expect the first expedition to succeed. After all, they so rarely do. It took twelve attempts to get a successful return from the Moon, eight to reach Mars, and seventeen to reach Venus." He smiled and shook his head. "No, I didn't expect you back."

"I suppose the odds were against us," admitted Brady, "but we didn't start thinking about them until we switched to rocket power on the way back, then Murphy said how nice it would be if, after coming all this way, we ran out of rocket fuel. Still, we made it, and that's the main thing."

"Is it really the main thing?" asked Drummond. "I want to know what's out there, the whole world wants to know it. The main thing is—just that."

Brady shook his head, "Sorry, sir," he said, "but you and the whole world will have to wait. I've already sent a private report by special code to the President of the World Senate, and I'm not saying a word until I've got permission from him."

Drummond's jaw dropped in astonishment. His whole job as Chief Security Officer was based on the interrogations he was to carry out on members of the expedition, interrogations which were to lead ultimately to his compiling a highly confidential report to be submitted to a secret session of the World Senate.

Before he could speak, Brady went on, "I have instructed all members of the ships' crews and all scientific personnel to say nothing until I, or the President, give them authority."

Drummond gaped in outraged bewilderment, and it was seconds before he managed to gasp, "But, Brady, this is ridiculous. I am here to take your report on behalf of the President and the Senate, you have no right to issue such orders without my consent, and I shall see that they are countermanded immediately."

Brady lost his smile early in the tirade and when it was ended he said, "I'm sorry sir, but what I have to tell is too big for anyone but the President to hear, I can't take any chances on it leaking out. Even my own men don't know the whole story, but they know enough to let the whole of the cat out of the bag if they start telling it. I must apologise for my behaviour, but I think the President will endorse my action, and I would be glad if you would suspend judgment until you have heard from him."

Drummond eyed him balefully, he knew that Brady was not the man to go against orders unless there was a very good reason for it. He knew, too, that if he went against Brady, and he was in the wrong, his career would suffer accordingly. He was not abnormally ambitious,

and he owed his position to his farseeing mind and not to the number of political strings he could pull, as did so many of his colleagues.

After a minute he nodded, "I trust your judgment, Brady, I'll arrange for a special plane to take you to Peace River. The President is holidaying down there at the moment."

Hugo Bannerman, seventeenth President of the World Senate, hated written reports. He had received a transcript of Brady's coded message about an hour before Brady and the ships landed. The report was a long one, and it began by apologising for approaching the President over the head of General Drummond, and went on to tell of momentous discoveries which should be first and foremost for the President's ears alone.

Bannerman didn't bother to read further; he preferred to learn the facts of any particular case direct from the lips of the person best qualified to give them, and just before Commander Brady left in his special plane he received a peremptory summons to wait upon the President, and give him, verbally, the details of his momentous voyage.

He welcomed Brady cordially, for it had been his own personal prestige that had forced the passage of the Bill in the Senate authorising expenditure on the great project of reaching for the stars. Its success was a vindication of his policy.

"I read the first page of your report," he said, "and that's why I sent for you. I know you found another race out there, and I have released that information for public distribution. But that is all I have said. What I want from you, Brady, is your own story, with your own feelings and reactions thrown in, and I can't learn those from a few sheets of paper even if you had gone so far as to forget your Naval training and include a few emotional suppositions." He smiled slightly as he noted Brady's slight discomfiture.

Brady leaned back in his wooden-armed chair, "Do you think it was wise to let that much out, sir, without reading the rest of the report?"

Bannerman banged his pipe on the heavy chrome ashtray on his desk.

"Everyone in the world knows you're back, Commander," he replied. "If something official isn't forthcoming quickly there will be all sorts of rumours and threats flying about. People will want to know why we are suppressing the news, they will accuse the government of commercial exploitation, of political banditry, of everything under the sun. I gave them that much to keep them quiet, as an official report from the office of the President it will be believed, and

I have told them that we are busy studying the rest of the knowledge we have gained before issuing a full bulletin on the expedition."

"I'm sorry, sir," said Brady flushing again, "I didn't realise it was like that."

"How could you, you're a spaceman not a politician," smiled Bannerman. "Now, go on, and tell the whole thing in your own words."

Brady leaned forward in his chair, his arms pressing hard into the sides. "There's not only one race out there, sir, there are hundreds," he said quietly.

Bannerman's face lost its smile, he whistled. "You must have kept that fact pretty quiet, Brady," he remarked.

The Commander nodded. "No one knows outside the officers and the scientific complement, sir, I couldn't keep quiet about one race, but about hundreds—" he shook his head expressively,—"I daren't let that get around until I'd reported it officially."

Bannerman nodded and drew an deep breath, "Well," he said, resignedly, "let's have the rest of it."

"From what we learned only one race counts for anything," went on Brady. "They're known as the Rihnans. They control the whole Galaxy, and every other race is subservient to them."

Bannerman's face grew longer. "How many more shocks like that have you got up your sleeve?" he asked.

Brady smiled slightly. "From an assignment like this you must expect a lot more, and I can assure you there is a lot more," he replied. "The facts, as briefly as possible, are these. The race with whom we came in direct contact are the Centaurans, they are one of the underdogs, so to speak. We never saw a Rihnan in the whole eleven weeks we were with them."

"You mean the Centaurans were in control of their own spaceships, and their own weapons, and there were no Rihnans in command or control?"

"That's right, but I'll have to start at the beginning if I'm to make any sense out of it for you," said Brady.

"In other words I'm talking too much, all right I can take a hint," growled Bannerman, but there was a twinkle in his eyes as he said it.

Brady flushed, and went on, "The Rihnan Galactic Empire has been in existence in its present form, for nearly a million years."

Bannerman's eyebrows went up sharply, but he said nothing.

"The main part of their history really begins some six hundred thousand years ago, when a cosmic calamity destroyed their home system, three planets in the Fomalhaut Group. Their sun turned

suddenly and violently into a white dwarf and despite their scientific advances they couldn't gain sufficient warning of the disaster to evacuate their worlds, and the greater part of the race was wiped out, together with the three planets which held it. Up to that time they had held the usual empirical grip on the Galaxy you might expect, but after that the remainder of the race outside the system seem to have acted pretty quickly, since even that calamity didn't loosen the hold they had on the rest of the Galaxy. They set about rearranging things with what must have been incredible ingenuity, and they formed what we have found today, an Empire without a centre, wherein the stateless race is master.

"They formed a central Galactic Council to govern, and as far as I could gather this is a body made up of one representative from each of the member states, presided over by an elected Rihnan. They meet roughly once a year."

"Being a President myself, I smell a rat," remarked Bannerman succinctly. "Who elects the President?"

Brady grinned, "That's the catch, sir. The C.G.C., as it's known for short, is responsible to the Grand Council of the Rihnan Hierarchy, and the Hierarchy appoint the President. The Grand Council is made up of Rihnans from all parts of the Galaxy, and nearly all the posts are hereditary."

Bannerman drew a deep breath, "Politics don't seem to alter much anywhere, do they? It's almost the same technique the Russians used back in the nineteen-forties, unite and rule, even if the people don't want to unite. Still, they must be pretty smart to use it on a whole Universe."

"That's not all by a long way," put in Brady. "The real genius behind the way in which they set up this new form of government is shown by their handling of the shift in the balance of power, the sort of shift that must happen when such a catastrophe occurs, and which could be fatal to an empire the size of theirs. Most of what I'm going to tell you now we gained by observation and by careful indirect questioning, a lot of it is supposition, but the politico-psychologists think that it is pretty accurate."

"Obviously, while their own system was in being, the Rihnans had absolute control, they had a central base for operations against any hostile action which might be forthcoming, and with that base gone they had nowhere that could safely be called a refuge, and short of taking over an entire system there didn't seem to be any way out. That they didn't attempt to do just that, we believe, was because they didn't have time to organise it. They had to move fast and such a scheme wasn't fast enough."

"It appears that their science is, generally speaking, in complete opposition to that of any other race in the Galaxy. Its principles, so we are told by the Centaurans, are to other races outrageously unworkable, and as a result its genius at inventing totally destructive weapons is second to none. Early on in their career the Rihnans discovered that as a result of these two factors no other race could duplicate their weapons even if given a working sample. They could be operated by other races, yes; but built, repaired or duplicated, no!"

Bannerman leaned forward incredulously over his desk. "Are you quite serious?" he asked grimly.

Brady nodded.

"But if that's so—"

"Bang go our hopes of carving a stellar empire," finished Brady. "That is as maybe, but let me finish. The Rihnans decided that the desperate situation they were in demanded desperate measures to cure it, and they got the idea of giving an equal number of each type of weapon to each separate member of the empire. With the weapons went the equally incomprehensible means of defence. You'd think that such an action was lunatic in the extreme. Well, other races thought so too, but for the time being nothing happened, they were all waiting for someone else to make the first move. Even so, it wasn't long before two minor states with long lists of grievances against each other tried to beat one another's brains out with the aid of their new toys. The story goes that the war went on for two years, and at the end of that time no lives had been lost, no damage had been done, and each of the combatants was bankrupt as a result of its economic attempts to defeat its rival. All that time the Rihnans sat back, they did nothing, and they said nothing; the war finally degenerated into a sort of farcical comic opera. Finally it died out in the ridicule of the rest of the Empire, and from that time war has been dead—almost."

Bannerman grunted as Brady paused, he had not missed the menace behind Brady's added, "Almost."

"After all that I can only assume that you have another bombshell you want to toss into my lap," he said. "Well, let's have that, too."

"I'm afraid so," replied Brady. "It's the answer to the question why have we never known of all this busy Universe before? Why did they never make themselves known to us? The answer is, briefly, that until recently we did not come up to the standard necessary for the Rihnans to take an active interest in us. They knew of our existence all right, the atomic bomb explosions in the nineteen-forties told them that. That's how they get to know about most up and coming

racés, nearly all of them reach that standard at some time or other, and then they either blow themselves to eternity or develop as we have done, to the point where interstellar travel is reached. If the first happens, well it's just too bad, no one is interested, but if the latter is the case, then the race concerned becomes sufficiently interesting to warrant inclusion in the Empire."

"If they want to be included," put in Bannerman.

"That is where my 'almost' comes in with regard to war," said Brady. "It seems that a lot of races don't want to come in. They prefer to stay outside and try and carve an empire for themselves, only there isn't anything left for them to carve an empire from, except the Rihnans, and that is the only time that war rears its ugly head in the Galaxy, only it isn't war, it's plain onesided slaughter. Every weapon the Rihnans have ever invented is turned against the newcomers to show them the error of their ways."

He paused grimly, "I might add that there are no independent races in the Galaxy."

Bannerman relaxed in his chair, and blew his nose with some violence. "I see why you didn't want to report to anyone but me," he said. "You couldn't very well do anything else but refuse to talk to Drummond." . .

He rose and walked across to the window, where he stood looking out over the twisting, turning snake of water that gave its name to the small village of Peace River. Brady said no more. He had reached the end of the important part of his story, and he knew that Bannerman wanted time to think about it. His mouth and throat were dry from the effort of talking and he longed for a cigarette or a drink.

Bannerman stood for nearly five minutes without moving, then he turned and slowly made his way back to his seat.

"Either we join the empire or else—" he remarked. "Is that it?"

Brady nodded, "That's it, sir."

"It all boils down to the fact that we have very little time in which to act," continued the President. "We cannot accept their terms and play for time until we've caught up with them technically, that might take hundreds of years, and by that time the whole Solar system will be rotten with traders and tourists, diplomats and spies from all over the Galaxy. We'd have no chance of developing anything in secret."

He sat back in his chair and regarded the ceiling with almost myopic intensity. Brady fidgetted in his chair, his own thoughts throughout the return trip had followed the President's exactly. He stirred, fearful at first of interrupting Bannerman's train of thought, then he said, tentatively, "Sir—"

"I suppose," commented Bannerman, "you are going to tell me that you have the solution." . .

"No, sir, only an idea," replied Brady.

Bannerman straightened in his chair, "Well, that's more than I have," he said. "Let's hear it."

"Our main objective for the immediate future must be to get hold of some samples of the Rihnans' weapons," Brady told him. "We can do nothing unless we have at least a chance of finding out why the Rihnans are seemingly unconquerable. We may be able to find out what makes them tick, and after the way we cracked the secret of the Stellar Drive I'd give us at least a fifty-fifty chance of doing it. The next point is that we must get hold of those weapons without arousing suspicion, for if the Rihnans know what we're up to, well—" Brady left the sentence grimly unfinished and sat back.

Bannerman nodded his agreement, "We certainly can't attack without having some idea what we are attacking. I take it you have some ideas on how all this can be done?"

"Yes, sir, I think it can be arranged," replied Brady, dryly.

II.

The three ships were hidden deep in the black depths of the rock-walled valley of Triton, the larger of Neptune's two satellites. No sunlight reached this far into space to relieve the empty gloom, which was only slightly brightened by the light of a million stars gleaming with almost artificial brilliance in a dead black sky. Even the light from the parent planet did not reach within the valley, for it lay on the opposite side of Triton, and even that dim light was, therefore, denied the crevice.

Stephen Brady was confident that from where they lay no detector could find them, hidden as they were against the bulk of the tiny, barren moon. He sat in the main control room of the flagship of his small squadron and waited, as he had waited for three days, for the passing of the Centauran ship bearing ambassadors from that race to the Solar system. His plan was not foolproof he knew, but he hoped that its very simplicity would carry it through.

He squiggled aimlessly on a sheet of paper while his thoughts wandered half-heartedly over a hundred details of the operation. He looked up from his doodling as the cabin door was pushed back on its rollers and the tall, blonde figure of his second-in-command, Lieutenant Murphy, entered.

"Any sign of them yet, Murphy?" his question was purely rhetorical.

The Lieutenant shook his head. "No, sir, no trace. I'm keeping detector power as low as possible in case they are able to spot it."

Brady nodded absently. "Good—if only they'd come and get it over with before I lose my nerve and call the whole thing off."

Murphy slumped casually into another chair, mentally giving thanks for the lack of discipline on the small ship which allowed him even that small familiarity.

"Well, if they're on schedule they should be along within the next hour or so."

He pulled a packet of cigarettes from his pocket and offered one to Brady who accepted it with a mumbled, "Thanks."

"Are you sure they'll send the sort of ship we want, sir?" asked Murphy after a moment's silence spent in lighting up.

Brady smiled grimly. "They'd better, Mr. Murphy, or all this will do not the slightest good. I'll take a small bet that they will—after all you've only got to put yourself in their shoes. You are the ambassador of the mighty race that rules the Galaxy, and you are invited with suitably awed and humble reverence to visit a backward race of nobodies who inhabit three planets revolving around a minor sun in a remote corner of the Galaxy. What do you do? Put on your oldest clothes and dig up the oldest spaceship you can find to make the visit? Oh dear, no, you put on your best clothes, select your most efficient officers, put them on your finest and best armed space cruiser and set out to create the biggest possible impression you can. I'm gambling they will do just that, and if I'm wrong you can go out and shoot every psychologist you can lay your hands on, they're the ones who said that there was very little difference, psychologically, between us and the Centaurans."

Murphy shook his head doubtfully, "Well, I hope so, if they do just that and your plan works then we may have a chance."

"Chance nothing," growled Brady, "it's a stone cold certainty, and don't let anyone try to tell you different. We've got to have the confidence of the devil to pull this thing off, if we haven't we're sunk before we're started."

The intercom buzzed briefly as he finished speaking, and he leaned forward to flip open the switch.

"Detector room calling Commander Brady."

"Go ahead detection, Brady here," he replied, his eyes moving triumphantly to Murphy.

"Three craft approaching from direction of Pluto orbit. Range two million plus. Leading two craft identifiable, third of origin unknown and considerable size." . . .

"Received," snapped Brady, flicking off the switch. "It's them for sure and right on time. With the biggest cruiser they could find." He laughed and reached for another switch, "Plot?" he asked, "Brady

here. Give me range and bearing of the flareship in relation to vessels just reported."

There was an instant pause before the loudspeaker reported, "Flareship two million minus, one three two degrees green, with elevation one seven. Approximate distance from group three hundred thousand."

"Report when the flareship is astern of the group at distance of one hundred thousand," ordered Brady, and switched off after hearing the acknowledgment; to Murphy he said, "In about two minutes."

"I hope Franklin knows what he's doing," remarked Murphy, gloomily.

"He knows where the flareship is," replied Brady. "All he has to do is steer reasonably close to it and make sure the Centauran detectors are suitably confused. Is the decoy all ready?"

"Waiting for the word, sir."

The intercom buzzed again, "Flareship in position, sir."

"Ignite," rapped Brady, and in the Plot Control room the officer in charge pressed the remote control switch, and two million miles away the flareship exploded, flared briefly in the blackness of space, and was gone.

Brady listened only half consciously to the lieutenant's, "Flareship ignited, sir."

In his mind he asked himself, would the Centaurans go on? Or would they play safe and turn back? He turned to Murphy, and nodded, "Send away the decoy, Mr. Murphy," he said. "We don't know how long it'll be before the Centauran escort get back to look into it—if they come back."

Murphy smiled confidently, "They'll come all right. Even a blind man couldn't miss a flareship of that size going off at that range."

"Don't be too sure. If they do miss it they'll never believe us later on when their ambassadors' ship really has disappeared. That's the whole hinge of the plan, we must establish an alibi before that cruiser disappears, afterwards will be too late."

Murphy nodded, "I'll get the ship away."

Brady heard the roar of the take-off rockets five minutes later and watched through the transparent dome of the Control Room as one of the other two ships mounted to the jet black sky on golden jets of flame. If Franklin, in command of the two escorting Earth ships, was doing his part properly, the sudden appearance of the ship from Triton would never be noticed. He sighed and mentally crossed his fingers, the next few hours would tell the difference between the success or failure of his mission.

Murphy returned a minute or so later and he was still looking out of the port.

"Decoy away, sir."

"I've got eyes," snarled Brady, then regretted his outburst. "Sorry, Mr. Murphy, I've got the jumps. I think I'll turn in for an hour or so, call me as soon as the decoy returns."

"Aye, aye, sir."

Brady lay down on his bunk fully dressed, knowing he would not sleep, but glad to get away from the control room and its ever pressing reminders of the job ahead of him. It was pleasant to relax and loosen the buttons of his uniform. Murphy would deal with anything that came up unless it was urgent, and then he would call him if he wasn't sure.

His eyes rested unseeing on the deckhead above his bunk, and against its dull, grey background he followed in his mind the progress of the plan he had placed before the President six months before.

At first it had been received with ridicule, Bannerman himself had condemned it as a schoolboy device, too transparent to fool anyone but another schoolboy, but gradually his points had been driven home, one by one, until the whole complexity of the idea had been accepted. He had the backing of the politico-psychologists on the major point of what type of ship the Centaurans would send in answer to the Earth government's servile invitation for them to look over the Solar system.

Other opinions were asked, Generals, Admirals and Politicians and each of them agreed with the prime necessity of getting hold of some of the Rihnan weapons, but none of them could improve upon Brady's plan. It took over two months but at last the President agreed and gave Brady a free hand to make what arrangements he thought necessary.

As was expected the Centaurans accepted with alacrity the offer to send representatives to visit the Solar system, and it was agreed that an escort of two Earth ships should be sent to guide them from an agreed point just outside the orbit of Pluto to the Earth. The Centaurans' own convoy of six ships, the largest of which would carry the envoys, would join up with the two Earth vessels, and the remaining five Centauran ships would await the return of the ambassadors at the same point.

Brady sighed and turned his face to the port at the side of his bunk. Outside it was pitch black, save for a few dull lights which marked the position of the other ship.

It all seemed so ridiculously easy when at last the plans had been put in hand, and once on the move even the President had expressed more than grudging admiration for the competent way in which Brady

was handling the affair. There were so many logical and extremely possible ways in which the scheme could go wrong. Each slip was as logical as the actual road which leads to ultimate success. Perhaps the ambassadors' ship would turn back in alarm when it detected the explosion of the flareship? But that obstacle was passed. Perhaps the other five Centauran ships would fail to spot the explosion, or if they did, perhaps they would ignore it? Perhaps the ambassadors' ship would decide to get in touch with the other Centauran ships after the explosion, in which case the decoy was running into a certain trap if they tried to tell the story about the convoy being destroyed by a local phenomenon known as a 'thunderbolt.'

Even with doubt strong in his heart Brady chuckled to himself. That had been the best stroke of all. He imagined Faulkner on the decoy explaining quite seriously how the Solar system harboured a peculiar phenomenon in the shape of a mobile and natural force field of no great size, but potentially fatal to any ship which came in direct contact with it and was not insulated. Not knowing the phenomenon to be confined to their own system the Earthmen had assumed that the Centauran ship would be insulated against it, and since such was not the case and they had encountered a 'thunderbolt' the Centauran ship and one of the Earth vessels had been destroyed in the resulting explosion. The decoy, faked up to appear badly damaged in such an explosion as they were to report, was to be concrete evidence of the disaster.

It was so naive, but in its naivety lay its chance of success.

Brady turned his eyes back to the grey deckhead. Even in success the road was opened to greater and even more insuperable difficulties. Would they be able to break the Rihnan weapons? Would they be able to improve upon them? For if they couldn't there was no hope of conquest for the Human Race.

Even as the last thought crossed his mind Brady wondered if it was the right path to take. The road to freedom for mankind seemed to lie along an embattled and bloody road, and if they were initially successful long and terrible wars might be the result of their labours. Logically, galactic warfare was the only possible outcome of their efforts, and galactic warfare might result in the destruction of the Human Race. Was freedom worth that price? He tried to picture the Solar system as one small cog in a pattern of thousands of subservient races, and he failed, for such could not be the destiny of man. And how many other races had thought the same? In a million years so many could arise and become lost in the teeming myriads of beings scattered through a million suns in the Galaxy, and twelve thousand million humans were challenging them all.

The story of David and Goliath sprang suddenly to his mind even as sleep at last drew down his drooping eyelids, and he slipped into a dream-scattered sleep where nightmares of blood and battle hovered in an uncertain background.

He slept soundly for three hours before he was awakened by Murphy knocking on his cabin door.

He was wide awake in an instant, and he knew what Murphy was going to say even before he reported, "Decoy returning, sir."

He was out in the control room in time to see the ship come warily down to rest near her previous position in the valley, and he waited with mounting impatience for the arrival of Faulkner its commander.

The chubby red-faced lieutenant literally bounded into the cabin, his eyes gleaming and his face telling of success before he opened his mouth.

"They swallowed it hook, line and sinker, sir," he gasped excitedly. "We met them barely an hour out from the point where the flareship went up, they must have come in awfully fast—if we'd been ten minutes later our direction would have been suspicious had they been using forward detection. I told them the whole story and let them inspect the ship. They were in a terrific flap at first but they calmed down later and gave us some help with repairs. I said I was returning to Earth to report, and that no doubt they would wish to report back to their own government."

"And they went?"

"Like lambs, sir," replied Faulkner. "I think they were too upset to think straight. Frankly, I've never seen anyone in such a panic, but the story got home all right, there's no doubt."

Brady bared his teeth in a grin of triumph, and turned to Murphy. "Get this message off to the President at once, 'Plan successful, prepare approved reception for one large Centauran cruiser,' sign it in my name and send it in code by closed beam."

Murphy nodded and left the room at the double.

Six hours later, as they were making preparations to leave for Earth, Murphy brought a message to Brady, his face agleam with excitement. He handed it over without a word.

Brady took it and ripped it open with eager fingers. One line of type read, "They're in the bag. Congratulations. Bannerman."

He let out a long sigh of relief and turned a flushed face to his second in command. "You needn't look so pleased, Mister Murphy," he scolded in a voice which belied his words, "this is just the beginning. We've started something that we may not be able to finish, and we may be sorry before we're through. Take off for Earth in fifteen minutes."



III.

For the second time in less than a year Commander Brady led a squadron in triumph back to White Sands Spaceport, and it was a grinning General Drummond who shook him warmly by the hand in his office.

"I know," said Brady, before Drummond could speak, "you didn't expect us back."

Drummond laughed. "It's getting to be a habit with you, Captain."

The smile slipped from Brady's face. "Captain?" he queried.

Drummond nodded. "Congratulations, the order came direct from the office of the President this morning, to await your arrival. That lieutenant of yours gets a lift up too, what's his name?"

"Murphy."

"That's right."

Brady grinned with undisguised pleasure. He had no illusions about the length of time he would normally have had to wait for his extra star had it not been for the successful completion of his mission.

"Tell me, sir," he asked, "how did it go?"

"They came into it like lambs to the slaughter," replied Drummond. "They had a welcoming committee to put them at their ease; and they just had time to find out what that mysterious flash was they spotted not far from Neptune. Do you know about that?" Drummond cocked a quizzical eye at Brady.

"Not a thing, not one little thing," Brady was all innocence for a moment before breaking into a gust of laughter in which the General joined.

"Well," went on Drummond after a moment, "they just had time to find out the answer before we flooded the place with gas. No warning, no smell, no trouble. They went out like lights, the lot of them. Of course it put out our welcoming committee as well, but they didn't mind that, they were expecting it anyway."

Brady sat back in his chair. "Where are they now?" he enquired.

"They are lying stripped of their weapons and anything else that might be useful, in an impregnable fortress on a remote island in the middle of one of the great oceans on one of the three inhabited planets of the Solar system," returned Drummond with pompous certainty.

Brady lifted his eyebrows questioningly.

"That's all you're going to know, Captain," said Drummond. "It's the President's idea, the fewer people who know about it the better, just in case the escort didn't swallow that story and we get a few spies poking around to find out what really went on. Their ship has been taken care of too—we've got half the scientists in the system working on it right now."

Brady nodded. "Yes, I guess it's as well, we can't be too careful from here on in. It's going one step at a time and very little leeway on the side of error."

"Oh, by the way," interrupted Drummond, "you have also been appointed special adviser to the President for the duration of the crisis. You're to report to him at Peace River as soon as possible, and leave your squadron in command of Murphy."

"Is it still my squadron?" asked Brady.

Drummond nodded, "Yes, it's yours to do with as you please. Even Space Control can't touch it unless you agree."

Brady lifted his eyebrows at such undreamed-of condescension, but Drummond merely shrugged. "Direct orders from the President," he said, "you're a big boy now."

Brady smiled, "I'll get along to Peace River at once, sir," he said. "Doesn't do to keep the President waiting too long."

"Not this one, anyway," agreed Drummond, rising and shaking hands. "He's one of those rare birds who Believe In Getting Things Done."

Brady laughed, "Goodbye, sir, see you soon."

Even Bannerman was anxious to see him two hours later when he got to Peace River, and he was taken into the President's private suite with almost indecent haste. Bannerman was at his desk dealing with a mountain of paper work, but he put it quickly aside as Brady entered.

"Glad to see you back, Captain," he greeted Brady. "Fine job you pulled off out there."

Brady grinned, flushing as he did so, "We had a lot of luck, sir."

"A job like that needs a lot of luck," insisted Bannerman. "Needs a lot of guts as well. But most important, it's given us a flying start, one that we needed rather badly, if it had failed we needn't have gone any further, we could have stayed right here and not bothered, for even if we had tried we'd have been stopped."

"I don't think we're out of the wood yet, sir," said Brady soberly.

"Neither do I," agreed Bannerman. "Not for a moment, but the worst part is over, and now I'm going to knock another nail in the signpost of success."

Brady looked suitably interested.

"Before they have time to do much thinking about it I'm sending them my condolences at the loss of their ship and its passengers and crew, pointing out diplomatically that we also suffered no small loss as a result of the accident, and asking them in the same breath to send another ambassadorial mission. I shall tell them that this time we shall ourselves insulate their ship against the possibility of a repetition of this recent disaster."

Brady smiled his approval. "I think that's smart, sir, they certainly won't have much time to get their breath. But what happens when the next load comes, if it comes."

"They'll come all right," Bannerman assured him, "and when they do they will be treated with respect and cordiality. But they will be told nothing and they will see only what is placed for them to see, everything else will be very carefully concealed. We shall see to it that they go home having apparently created an impression by their visit, but we shall make absolutely sure that they are not given any impression whatsoever about the possibility of us joining the Rihnan empire. If we don't make any hostile move I don't think they will bother us for maybe as long as three years. With our resources we can do a lot in three years."

"Can we do enough, sir, that's the point," put in Brady, dubiously.

"We've got to," returned Bannerman. "Three years is my minimum figure, we may have longer but we can't be sure of that. We have to budget for as little time as possible. That's why I've called you in as my adviser, you know more about this business than anyone, myself included. I think you'll be more useful to me than to anyone else."

"Thank you, sir." Brady blushed at the implied compliment.

"All right," said Bannerman, "now get out of here. My secretary will get you settled."

As Bannerman had predicted the second invitation was received with as much eagerness as the first had been, and the large Centauran delegation arrived and was received with all due deference and ceremony. Their visit lasted two months during which time they probed and pried as deeply into the life and development of the Three Planets as they wanted, and it was very doubtful if they had even the vaguest idea that every move they made was carefully watched and directed along such channels as their apparently over-awed hosts desired them to take. It was all very skillfully done.

The records they accumulated during their stay must have been enormous, for they noted, filmed, examined, wrote about and recorded in a hundred ways everything with which they came into contact; as Bannerman remarked gloomily to Brady one day, "the only thing we appear to have over them is that electronic cerebro-translator which Lindeman has developed. That really has got them guessing."

"I hear that progress on the captured ship is greater than we expected," said Brady tentatively, actually he had heard nothing of the sort, but he knew that Bannerman had his finger right on the pulse of the whole project, and he hoped his tentative enquiry would not be taken as insolent inquisitiveness.

But Bannerman merely nodded. "I was going to have a chat to you about that sometime," he replied. "I had a long and very confidential report from Hartmann last week, he's in charge of the whole show, you know."

Brady nodded.

"Hartmann leads off by saying that he thinks all these other races must be senile idiots if they can't solve the problems of the Rihnans technology."

Brady's eyes flickered apprehensively, "Does that mean—?"

"It means," broke in Bannerman, "that Hartmann says there is no practical reason why we should not have the secret of everything on that ship inside twelve months, and improve upon it into the bargain."

Brady whistled. "That's better than we ever hoped for."

"It's ten times better than I ever dreamed possible," admitted the President. "In fact it's so good that I don't believe it."

"Isn't Hartmann reliable?"

"Sure, he's reliable all right, but to come out with such a categorical statement like that after we've been led to believe just the opposite—" Bannerman shook his head. "No, I just don't believe it, something smells. If we can break down these weapons why can't any other race in the Galaxy? In other words, was that cruiser equipped with the weapons we expected, or was it just a blind to spot us on a wrong move?"

Brady pursed his lips and nodded his understanding. "I see what you mean, sir." The news that such great progress had been made in such a comparatively short time had surprised him. He would have been glad to hear that one small discovery had been made, but to be told that within a year the entire store of secrets within the giant Centauran ship would be an open book to them, that was a lot to swallow. He agreed with Bannerman, something was wrong somewhere. Or was there?

"What else does Hartmann say?" he asked.

Bannerman lifted his shoulders, "Nothing, that was his first informative report, only I wish it wasn't quite so informative."

He relaxed in his chair, gazing thoughtfully out of the window, and Brady, noting his preoccupation, decided against any further questions. He had learned a little too much in the last few minutes and he wanted time to think about it.

It was some minutes before the President spoke again, then he said, "Brady, I want you to go and see Hartmann, talk with him and with the other people on the project, see what they're doing, get to know exactly what Hartmann meant by his report. I can't help thinking that perhaps he said more than he intended. You can spend a week there with him and take a good look round, then let me have an eye-witness report together with your own personal impressions. If it only confirms my own feelings it will have served its purpose. You can leave at once."

Brady drew a deep breath, "Where does he hang out, sir?"

Bannerman eyed him roguishly, an impish grin creeping across his face while his eyes twinkled with puckish expectation.

"Siberia," he replied.

Brady winced, "I might have known it would be somewhere nasty."

"Oh, it isn't so bad," said Bannerman. "You can do it in five hours straight flight, and I understand his quarters are positively

palatial compared with my humble home. They are entirely underground, the laboratory, the living quarters, everything."

Brady grimaced again, "I guess I can stand it for a week, sir, I'll leave first thing in the morning."

Brady's plane took off at eight the following morning and by one in the afternoon they saw below them the flat, white, rolling wastes of the Siberian steppes. As he looked on the desolate landscape Brady mused upon the fact that with all his achievements man had not managed to conquer the wild Asian desert. Even from their altitude he could make out the dark patches of the great virgin pine forests, scattered in irregular formations over the entire scene.

The plane began to lose height and the whine of the jets fell a pitch lower as they began to circle in preparation for landing. Brady looked at the landscape with renewed interest, but still all he could see was the vast white plain, broken here and there by the forests and an occasional village or small town.

The landing field was rough and hardly better than the rest of the plain from which it was carved, and Brady cursed mildly as his spine jarred under the shock as the wheels met the ground and found a rut over which they bounced madly, and then they were down with nothing in sight but a tiny group of rough buildings which looked hardly bigger than cattle sheds.

A small car came bumping out to them as they descended from the plane, and Ryan, the pilot, introduced him to the driver, a tall, heavily built, athletic youngster with close-cropped hair and a broken nose.

"Captain Brady—Ben Wilson."

"Hello, Captain," grinned Wilson. "I'm Hartmann's chief assistant, he asked me to meet you."

Brady nodded and mumbled a conventional greeting, trying to conceal his surprise that Hartmann should have such a roughneck for his assistant. He felt that 'bodyguard' would have been a more appropriate description.

They climbed into the car and as he drove them towards the buildings Wilson kept up a stream of informative conversation.

"This field," he told them, "is built over the labs and workshops, and the buildings you can see are just camouflage for the air vents and the elevator shafts. Unless you were told I guess you'd never know just what was under your feet."

Brady smiled, "You certainly chose an out of the way place," he commented.

"Had to," was the reply, "and even now we have trouble with a few reporters who have stumbled on to some bit of information or

other. Had one fellow up here a month or so ago we just couldn't shake off."

"What happened?"

Wilson laughed. "Last I heard he was shipped off to Venus, accidentally of course, and I believe he is having trouble getting back. When he does manage it we reckon he'll see things in a different light."

Brady felt slightly alarmed. He was not aware that officialdom indulged in the criminal practice of hijacking people who became a nuisance, and the casual way in which Wilson explained it made him wonder what other evils were committed under the banner of security regulations. He changed the subject and asked, "How are you making out with the ship?"

Wilson shrugged, "Pretty good so far, but we never know when we are going to hit a snag that'll stop us cold. Most of the work is still in the preliminary stages, even with the staff we have it's a slow job. You see, we've had to start from scratch in practically every branch of science, atomic theory, metallurgy, electronics, and so on. Basically it's all the same, but these Rihnans seem to have got a different slant on things, or perhaps they had a different beginning which led them to things by a different route. I'd better let Professor Hartmann tell you all about it, he's got his finger on every move that the rest of us make."

The car pulled up outside one of the smaller buildings and Wilson led them inside. It was a wooden shack on the lines of a Canadian log cabin, and was barely furnished with a stove, a desk, and three wooden chairs. The rear part was cut off by a rough, brown blanket which Wilson pulled aside to reveal another door. He unlocked it and they went through. Brady found, with no little surprise that the room was the entrance to a modern elevator shaft, and the high ceiling showed the cable drums and other sections of its machinery.

"This is a staff elevator," explained Wilson. "It will carry eighteen people at a pinch, but there are ten more scattered in various places. In addition we have eight goods lifts for taking large pieces of equipment and the more bulky supplies."

"The ship is down there?" asked Brady.

"Yep."

Brady blinked. "Mind telling me how you got it down? And don't say in one of the goods lifts."

Wilson laughed outright. "Nothing so simple, unfortunately. You see, we had to dig up the whole of that landing field to a depth of thirty feet, then we had to remove another ten feet of steel and rein-

forced concrete. We coaxed the ship down the hole under her own power and then filled it in again."

Brady whistled. "Some job," he commented.

"You can say that again, it meant that we had to learn how to fly the darned vessel in nothing flat in order to get it out of the way fast."

The three of them entered the lift and Wilson closed the gates before pressing the 'down' button that started them on their way into the underground base.

Brady estimated that they went down well over a hundred and fifty feet before they halted and stepped out into a brightly lit, steel-walled corridor. They followed Wilson along it until it joined another larger corridor that had doors set in it at regular intervals. As they walked, silent now, Brady read the notices on them with interest. Some bore the names of people, *R. H. Townsend, Physics No. 3*, another was *Professor E. K. Novac, Metallurgy No. 1*, and there were dozens of others. Some merely had notices without names. One was *No. 5 Chemistry Laboratory*, another *Assistant Director of Supplies*, while a third proclaimed that the room behind it was the *Main Chemical Distribution Centre*.

They stopped outside one which had *Professor J. Hartmann* on it. Wilson didn't bother to knock, a disciplinary error which surprised Brady more than a little. He went straight in and held the door open for Brady and Ryan.

Hartmann was seated behind a massive wooden desk which was covered with an untidy litter of paper and small pieces of equipment. He was a small man with a pair of green, flashing eyes that were set in a thin scrawny face beneath a mop of white hair. His thin lips and alert eyes gave him a continual air of intolerance which, although Brady didn't know it then, was the main feature of his personal approach.

Wilson said, "Captain Brady, Professor."

"Ah, excellent," Hartmann jumped from behind his desk and shook hands vigorously with Brady. "Right on time, Captain. The President informed me this morning that you were on the way."

"My pilot, Lieutenant Ryan," said Brady. "He got me here."

"Ah, yes, of course," Hartmann shook hands briefly. "Wilson will show you to your quarters, Mr. Ryan—"

"Lieutenant," corrected Brady mildly.

"Ah, hum, yes—Lieutenant," Hartmann shot a mean glance at Brady who was pretending to look elsewhere. "Wilson will arrange for your comfort while I talk to Captain Brady."

"Sure thing, Doc," Wilson led the pilot out of the room, and Hartmann waved Brady to a chair.

"An ebullient youngster, Wilson," commented Brady as he made himself comfortable.

Hartmann smiled thinly, "He has a brilliant brain despite his athletic exterior. He is the greatest expert on the theory of electronics in the world, and you know what a large field that is."

Brady raised his eyebrows in suitable surprise.

"That was one reason why I chose him as my assistant," continued Hartmann, "Also he is popular with the rest of the staff here. He seems to have the happy knack of friendship which most scientists do not seem able to cultivate."

"Oh, I'm not here to query Mr. Wilson," broke in Brady. "The fact is that the President was a little bewildered by your last report. He hardly expected so much in so little time, so he asked me to make a personal inspection."

The green eyes snapped angrily in his direction. "I thought my report was perfectly plain?" Hartmann was obviously lacking in respect for the mental powers of the President, and Brady shifted uncomfortably in his chair as he replied.

"Oh, the report was plain enough, Professor, but the President felt that, in view of what we already know of the Rihnan weapons, it was a trifle—optimistic."

Hartmann 'tut-tutted' irritably. "I should have thought the President was sufficiently aware of my scientific outlook to know that I am not given to either unnecessary pessimism or to ridiculous optimism. My report was merely a statement of facts as they were after we had completed our preliminary survey."

Brady took a firm grip on himself, and tried hard to assume the importance of his position as personal adviser to the President. "Well, the President wants me to have a look round and form my own opinions before I report back to him in a week's time."

Hartmann shrugged, and looked suddenly as if he had not the slightest interest in any peculiar whim the President of the World Senate might wish to indulge.

"I'll have Wilson take you round the laboratories," he replied. "He knows all that is necessary and in case of doubt he can always ask the man on the spot." He picked up the phone on his desk, and dialled a number. "Hallo, Wilson? Oh, will you send someone to show Captain Brady his quarters? Good, and will you arrange to escort him personally on a tour of inspection? Yes, that's right. He'll be with us about a week." He replaced the phone, and turned to Brady.

"Professor Wilson is coming round himself."

Brady rose from his seat and said, "Thank you, Professor, I'll try not to get in the way."

"Good afternoon, Captain," replied Hartmann more cordially. "I hope you will see enough to satisfy the President on your return."

Brady smiled, "I'm sure I shall, Professor."

The door opened and Wilson entered grinning cheerfully.

"I've put Ryan safely away," he announced. "Apparently the trip tired him out so he's going to turn in for an hour or so. How about you, Captain?"

"No, I'm not a bit tired," replied Brady, "in fact, if you don't mind, I'd like a chat with you right away before I start my tour in earnest, tomorrow morning."

"Sure, that'll be fine. We'll go to my apartment, we shan't be disturbed there."

Wilson's apartment, as he so grandly described it, was a small, cell-like room just large enough to take a bed, a table, two easy chairs and a bookcase. Its spartan appearance was relieved by a beautiful Persian rug, two landscape paintings of Mars, and a large ornamental piece of Venusian pottery.

Wilson offered his guest a drink and Brady accepted with relish.

"Hartmann didn't seem as if he wanted to tell me much," he said after an appreciative sip. "He told me that you knew all that was necessary, so I'd like a rough picture of what is actually going on before I look around myself."

"I'm afraid he wasn't in one of his best moods," agreed Wilson, "but he's the one man in the world who can make a go of this project. His powers of organisation are phenomenal, almost on a par with his knowledge of nuclear physics. He's quite a guy really."

"Oh, I don't doubt his ability," returned Brady, "the President wouldn't have put him where he is if there was any question about it, but his report, well now, that's another matter. Did you see it before he sent it?"

"Sure, I helped him to draft it."

"And what do you think? Is it the goods?"

"Yes, every word of it."

Brady lit a cigarette and then offered one to Wilson with a muttered and belated apology.

"You know as well as I do," he said, "what we were told about the power of the Rihnan weapons by the Centaurans during our first meeting on Sirius Five. We used what they told us as our yardstick all along. We were cautious, cunning is the word perhaps, we've not taken a single risk that could be avoided, and in front of us all was

the spectre of annihilation if we slipped up. Now, after all that, you scientists tell us that all the other races in the Galaxy must be fools if they 'couldn't make head or tail of these weapons. In three months you say you are well on the way to unlocking every secret that the Centauran ship holds. Just like that." Brady snapped his fingers expressively. "How would you feel if you were in our shoes? We didn't know what to think when we got that report."

Wilson nodded, "Yes, I see your point. Of course, we didn't realise all that when we drafted it, we just thought we were giving you some news that you would be mighty glad to get hold of. But I can assure you that every word is perfectly correct and every detail was carefully checked before we included it in the final draft. I'm not going to pretend that it's easy, it isn't. We are coming up against new techniques that we never even dreamed existed. There are problems, sure, but we haven't found one yet that has beaten us, it's taken a lot of hard work and some of us have had to readjust our concepts of physics and of atomic structure, but we're going ahead all the time. At the rate of progress to date that ship should be an open book to us within a year, and if we can't improve on some of the gadgets we've found then my name isn't Ben Wilson."

Brady drew a deep breath and shook his head in bewilderment. "I can't make it out," he said. "If what you say is true, and I don't doubt your sincerity for a moment, then we didn't do a single thing when we snatched that Centauran ship. There can't have been a thing on it of any value, certainly none of the unconquerable weapons that we were told about. If there were it wouldn't be so dammed easy."

"Now listen to me, Captain," broke in Wilson, "that ship was the most valuable thing any of us scientists have seen in centuries. We would have wanted another two hundred years at least before we could invent half the things that are in it, but with samples we're ninety-nine percent of the way there. All we need is time to catch up and readjust our ideas."

"But where do we go from here?"

"Straight ahead," replied Wilson. "Just give us a little credit for having some brains and you can carry on as if it was all turning out exactly the way you planned it."

"And if we're wrong the whole human race gets wiped off the face of the Universe."

"I'll show you to your quarters," Wilson changed the subject with pointed abruptness. "You've got a week to look around, wait until that's over, you may change your opinion."

Brady nodded, "I guess you're right."

The next day saw the beginning of a hard, grinding week, for Brady was not a man to shirk a task, especially one as important as this. He poked and probed into every facet of the work going on in the huge subterranean workshop until at last he knew almost as much about what was going on as did Wilson, his eternal guide and father confessor. Wherever he went or whatever he did Wilson was there to explain it all and to show which problem they were trying to unravel.

On the third day of his visit he had a concrete example of the progress being made. He spent the day in company with Wilson and a pretty blonde radiologist named Shirley Grant. She had been explaining to him in words of one syllable the difficulties they had been encountering while examining a long-range firing director which worked in conjunction with the ship's main armament.

"You see," she explained, "we know that the director trains and fires the main atomic force batteries which are the vessel's chief means of attack, but we're stuck because it must operate at enormous ranges, upwards of a hundred thousand miles is one guess."

Brady whistled, "What we could do with fifty of those," he said.

"Exactly, that's the catch. With two ships in operation against each other moving at almost the speed of light, how could such a detector work? By the time it had spotted, tracked and estimated the position of its opponent, and then trained and fired the armament, how far off would its target be?"

Brady nodded, "I see your point, but does the director do it all and still hit its target?"

"It must do or it has no purpose for existing," replied the girl. "Anyway, we think we are near the answer, and if you're lucky you may see the solution before you go."

Brady smiled at her obvious enthusiasm. "I hope so," he replied.

The incident was lost amid a welter of other inspections that he carried out during the day, and when, at six in the evening, he allowed Wilson to lead him to the canteen for a meal, he had completely forgotten the golden-haired girl and her problem in long distance ranging. He forgot her, that is, until he saw her leaving the canteen counter with a tray-load of food, and as she saw him and Wilson she gave them a brilliant smile and made her way quickly through the rows of tables to join them.

"Well, I was right," she greeted them, "you will have one small item of news to tell the President when you get back."

"You mean you've cracked that range-finder?" asked Wilson eagerly.

She nodded, her blue eyes sparkling with pleasure. "Yes, John and I finished it up an hour ago, otherwise I wouldn't be here. We were too close to have left off without taking the final step."



Brady leaned forward with quickening interest, "Tell us about it."

"Really, it's ridiculously easy now that we know how its done," she replied. "You know the details behind the fact of sub-space radio?"

Brady nodded. "Naturally, without it we'd be home on space drive years before any message we sent was received."

"Well, the Rihnans have sub-space radio as well, though in a different form, and what they have done is to mount normal long-range detecting waves on a carrier band adjusted to a sub-space wavelength. The effect is practically instantaneous, they track and estimate by means of the very wave which carries the force blast from the armament. From ship to ship, even at light speeds, doesn't take a millionth part of second at any range up to five million miles or thereabouts, and a millionth part of a second represents less than a mile in

error between the actual moment of tracking and firing. Once the armament is fired the error is about the same in the other direction, that is roughly point one eight nine of a mile. Double it for the two errors and you still have a miss, in theory, of less than point four of a mile. With the armament that ship has, point four of a mile is practically the centre of a death trap."

She sat back and looked at them in turn, triumph written all over her face. Brady let out a deep breath, and turning to Wilson, asked, "Does that all make sense to you?"

The scientist laughed, "Sure it does, Captain. It's only a minor problem actually, but it does show you just what we are up against."

"Minor problem, indeed," the smile left Shirley's face, she gazed angrily at Wilson, "after I've spent three weeks slaving my heart out over it you dismiss it as a minor problem."

Wilson flushed and hastened to make amends, "I didn't mean it like that Shirley, I was only comparing it with the problem of the actual armament. We still have to find out how that ticks you know."

Brady looked at him with some surprise. "You mean you can work the range finder but you can't duplicate the armament?"

"That's right," Wilson nodded solemnly. "We're still working on it, have been for two months. Oh, we know what happens when you press button A, and we can measure the power of its effect. We even got enough out of it so that Shirley and her assistant could work on the range finder, but apart from that," he shook his head, "nothing."

As he lay in bed that night Brady went over the incident of the range finder. True, it was proof that headway was being made, but he was still not sure that it justified Hartmann's report. He felt that he could not go to the President and say that everything in the garden was as rosy as Hartmann had said, for up to now he had seen nothing to justify it. It was true that progress was beyond all their expectations, but still it was not as advanced as it would have to be if they were to reach the level of Rihnan technology, and within a very few years.

He did not communicate his doubts to Wilson during the rest of his stay, and he used the time just as energetically as he had in the beginning. He spent a great deal of it in the huge, hangarlike shop which held the Centauran vessel, and he spent the whole of one day in the body of the ship itself, because he knew that if all this was successful he would one day, in all probability, have such a craft at his command.

He arranged with Ryan that they should leave for Peace River early in the morning of the day they had fixed for departure, and on the

preceding night Wilson came to Brady's room as he was writing the last of his notes.

"What will your report be, Captain?" he asked as he closed the door behind him.

Brady eyed him for a long moment, pondering his reply. At last he answered, "Not good, but then again, neither is it bad."

"You mean not as good as the one we sent in, and not as bad as you had expected?"

Brady smiled, "Yes, that's about it."

"Would it alter your outlook at all," remarked Wilson eyeing the ceiling with mild speculation, "if I told you that we broke the armament problem an hour ago?"

Brady froze in his chair. "Would it be true if you told me?" he countered grimly.

Wilson nodded, "I just heard—thought you might be interested."

It was a long time before Brady spoke again. He studied the pile of paper that constituted the notes on which he would base his report to the President the following evening. Then, slowly, he picked them up and tore them across. He looked up at Wilson and smiled, "You could have saved me such a lot of work by coming in a couple of hours ago."

Wilson grinned back at him happily. "Goodnight, Captain, I'll see you in the morning before you take off."

He went out closing the door behind him.

IV.

The silver squadron of ships glinted brilliantly in the light of the afternoon sun as they flew in formation across the cloudless blue sky, and Stephen Brady stood for a moment watching them as he climbed from his car outside the President's residence. It was summer, but the cool breeze from the hills offset the effects of the burning sun, and Peace River was certainly peaceful.

He watched the squadron until it vanished over the horizon and stood for a moment afterwards wondering at the apparent peace of the Universe in this gorgeous summer of 2228 Anno Domini. The threatening undertones of Galactic war were still not strong enough to make the average man aware of the gigantic issues that were behind the sudden great strides which the human race were making in the realms of scientific discovery. To most people the gradual appearance over the past four years of the great, heavily armed battle fleets was

merely an extension of the original discovery of the space drive, a logical link in the chain of scientific progress that would ultimately take mankind to the stars.

The average man was never even remotely aware of the months of effort in the giant workshops beneath the Siberian Steppes, he never knew the heartbreaking slavery with which scores of scientists and technicians had applied themselves to the task of unravelling the secrets of the captured Centauran cruiser. He had no inkling of the disasters and the disappointments with which every move was threatened, disappointments and disasters which, all too often, made themselves discouragingly evident at some vital point, often when success seemed to be within reach.

The months of endeavour had gradually born fruit, but the world in general never knew what had gone before. The periodic official announcement of new weapons and the building of new ships was greeted with an almost antipathetic disinterest, and the only shouts were from the few people who begrudged the giant sums which were called for in the periodic Triplanetary budget.

Gradually the fleets were built up, but none of the huge ships were allowed outside the orbit of the Earth or that particular planet on which it was built, and constant scouting by older type vessels was maintained to make certain that no Centauran ships came calling unannounced.

After four years of trouble and exertion they could say they were ready. Brady sighed and turned into the main entrance of the President's official vacation home. He doubted frankly that they were ready enough, they could do with twice as many ships and men, they would be glad of a dozen greater and more powerful weapons. The demands of war, actual and impending, were always insatiable, but they were as ready now as they would be in another six months and he doubted if they would have that much more time.

The President's secretary greeted him in the anteroom and broke his train of thought.

"He will see you straight away, Captain Brady. I was told to send you right in as soon as you arrived."

Brady smiled and nodded absently, passing through into Bannerman's private suite. The President was seated in an easy chair by the large french window, smoking a pipe, but he rose the instant Brady entered and shook his hand warmly.

"Glad to see you back, Brady."

"Thank you, sir."

Brady took the seat offered to him opposite the President, and when he had made himself comfortable, Bannerman said, "First, let me hear what you've got for news."

"Well, sir, it doesn't look too bad at first sight, but knowing what we're likely to be up against it doesn't look too good either. Venus and Mars are up to schedule with ship and armament production but the shortage of technicians is going to be the difficulty if we aren't careful. Those Mars tests on the new type protective screen and the A-type radiation weapons shows that they are definitely superior to anything we found on the captured ship. Hartmann and his boys did a grand job. We have a total of nine hundred first line heavy cruisers fully manned and at peak efficiency, plus another two thousand smaller craft ranging from destroyer types to three-man mosquitoes. The combined output of the Three Planets to the end of the current year will be a further ninety-six heavy cruisers and three hundred and twenty lighter vessels, but there will only be fully trained crews for just over half that number. In twelve months there is likely to be a disparity of over seventy percent."

Brady flipped shut the small notebook which he had been consulting during his recital. "That is the overall picture, sir, the smaller details and the other minor parts will be given in my official written report."

Bannerman nodded and sat back in his chair, his eyes gazing out of the window and over the river as it glistened in the afternoon sun.

"You needn't worry about it, Brady," his voice was mild and unflurried. "We haven't got that much time."

Brady tensed in his chair, a slight frown creased his forehead.

"You've had another note from the Centaurans, sir?"

Bannerman nodded, "Yes, three days ago and it's a final one. They've got tired of being put off every time they approach us, and I suspect that the Rihnans have been putting pressure on them to force us into the Empire, or else—"

"But why should they worry so much about us? We've done nothing that can harm them."

"No state and no empire can stand competition, no matter how small and how obviously unimportant that competition is. That is the lesson of our history books, and I suspect that the galactic scheme of things does not differ in fundamental principles like that. Anyway, we have eight weeks, roughly, in which to decide what we are going to do, which course we are to take, surrender or extinction."

"And you have decided," Brady made the statement flatly and grimly.

"Yes," replied Bannerman, "we shall pursue the policy we laid down in the beginning. I have the agreement of the heads of the armed forces to that effect, and they also agree with me that, while it may be

disastrous, fatal even to the human race, we must take that chance. Once this has passed we may never get another. We are as ready as we shall ever be, and if we do not succeed with what we have I do not think we shall be successful with more."

Brady cleared his throat which had suddenly gone dry and thick. He realised that he had been both eager and fearful for the coming of this moment, and now that it was upon him he did not know quite how to take it. The facts were grim enough, but somehow he could not feel utterly despondent at the prospects that were opened up. The odds were heavy, indeed they appeared to be overwhelming, but the knowledge that they were so, inspired an unjustified confidence in the ability of mankind to overcome them.

"I agree, sir," he replied.

"I imagined you would. I have signed an order this morning placing the joint fleets of the Three Planets on a full war basis under the command of Grand Admiral Richmond. We shall not despatch a reply to the Centaurans until just before the expiration of the time limit, and when we do it will be couched in such unmistakeable terms as to leave no doubt of our intention to pursue a course outside the orbit of the Rihnan empire."

Brady shifted uncomfortably in his seat. "Don't think me selfish, sir," he began awkwardly, "but might I ask about my own personal assignment?"

"I thought you might," Bannerman smiled slightly. "You'd like a space command I know, but, frankly, I would prefer to have you with me. If war should come—as I have no doubt it will—and we should, by the grace of God, emerge victorious I'll need men like you around me, and I can't have them risking their necks in a frontline battle cruiser."

"I understand." Nevertheless, Brady felt a pang of disappointment. He realised suddenly that all his hopes had been centred around the possibility of commanding one of the giant new cruisers which were to be the front line of any Terran force that met a hostile enemy. He realised, in the same breath, that Bannerman was right, he knew too much to be spared for such ordinary and such dangerous duties. It was not a sense of his own importance which made him think thus, although he did try to analyse his own feelings, it was, he decided, an overdeveloped sense of duty, a feeling that here was his rightful place in the scheme of things. He pursed his lips and turned his mind back to more immediate problems.

His disappointment must have shown in his face, for Bannerman smiled sympathetically.

"Your time will come, Captain," he promised. "If we are at all successful in the initial operations, speed in following up our advantage will be vital, and your advice and experience will be invaluable. After all," his eyes twinkled, "you know more about these aliens than anyone."

Brady smiled at the implied compliment. "What are the operational plans, sir?" he enquired, changing the subject.

Bannerman studied his fingertips carefully for a moment while he marshalled his thoughts.

He said, "The fleet will be divided into three groups. The first group based on Phobos and Diemos to protect Mars, the second and largest will be based on the Moon to protect Earth and Venus, and the third, the smallest group, will be held in secret on Uranus, firstly as a reserve if we need it, and lastly to cut off any Centauran retreat that the other two fleets may be able to force."

"The Chiefs of Staff are pretty optimistic."

"They can't afford to be otherwise," pointed out Bannerman. "In our position we dare not be cautious, we must take the initiative right from the beginning and never let it slip. Certainly, we could sit back and try to protect the Three Planets but where would that get us in the long run? We are not in a position to fight an entirely defensive war against the odds which are likely to be put against us. We've got to take offensive action as soon as possible, otherwise we shall get nowhere."

Brady nodded his agreement. "I don't think the Centaurans will be looking for trouble if they do come against us," he said speculatively. "After all, they have no reason to regard this as anything other than one of their usual taming expeditions. If we do get in early with a damaging blow it might throw them off balance and give us the opportunity to do more damage than might otherwise be possible if they expected us to fight back. We have been lucky so far, but we shall have to be very lucky in the future."

"And we must play our luck for all it's worth," said Bannerman, leaning forward in his chair. He hit his right fist into his left palm as if to emphasise the point, "If we can hit them first—" He relaxed and sat back, his sentence unfinished, but Brady was equally aware of the tremendous advantage to be had from the element of surprise. Under the circumstances with which they were likely to be faced, surprise might be the one critical factor.

"The reply to the Centaurans will be sent a week before the deadline," went on the President more soberly, "and by that time the fleets will be in position. We can do no more until the Centaurans make the next move, and I do not believe it will be other than hostile."

"We must assume so, sir," Brady rose to his feet. "And now, if I have your permission to leave, I have to submit a copy of my written report to the Armed Forces Directorate."

Bannerman stood up as well, nodding as he did so. "I'll not keep you, Brady," he said. "I shall be returning to Lake Success next week, and I'd like you to accompany me. In the meantime get yourself some rest. I expect you can do with some, and you're going to have to wait a long time before you get the chance of any more."

They shook hands and Brady took his leave. He handed his report to the secretary in the anteroom, and passed out into the open air and the sunlight.

The first thrill of anticipation he had felt when the President had told him of the decision to fight, was passing. He felt able to judge the coming conflict more logically now that his own position was clear. Dearly as he would have liked to command a cruiser he realised that if Earth and her consorts were to emerge victorious his own personal star would be greatly enhanced whether he was in the threatened space battle or not, whereas in defeat it would not matter a great deal either way, at the best he would be one of the pitiful survivors of a defeated race, and at the worst, he would be dead.

Death and destruction would be the bitter gall of defeat, and for the victors? If it were the Centaurans, nothing. If it were the Three Planets, then the whole Universe was open before mankind. There were no heights to which the human race might aspire, for that which could be accomplished once could, conceivably, be accomplished again. Victory would give them confidence, but what would defeat of their allies do to the Rihnans?

He was aware of the sunshine hot upon his head and he slowly donned his cap, moving thoughtfully towards his car as he did so. He stepped into it, still deep in thought, and drove off towards the city.

V.

The Centauran battle fleet came in past the orbit of Pluto ten days after the receipt by their government of the Terran reply to their note. The haste with which they despatched their fleet was occasioned by the strong rebukes they received from the Central Galactic Council for their mishandling of the whole affair.

The main fleet was despatched with all possible speed to exact retribution for the insolent attitude which had been shown to their friendly overtures. The fleet Commander had orders to damage but

not to destroy, to cripple but not to kill; he was told to do as much damage as he could without actually eliminating the race of upstarts who inhabited the three planets of Sol. He and his ships approached their task with the blind confidence of utter ignorance, and without attempting to ascertain if any possible danger lurked within the confines of the Solar system. They had carefully insulated their ships against the mysterious thunderbolts which were supposed to have destroyed their ambassadorial ship several years before, by faithfully copying the wiring installed by Terran technicians on the second ship. Their own technical staff took it as a sign of scientific backwardness on the part of the Terrans that they were able to duplicate it. It never occurred to them that its simplicity was in direct ratio to its uselessness.

The fleet came in one force, with no Scouts and with no other preparation against attack other than the defensive screens which they maintained rather as a matter of habit than one of safety.

News of their coming was flashed Earthwards by automatic plotting stations situated on the satellites of Pluto and Saturn, stations which did their job with complete exactitude before vanishing in the destructive blasts of small cruisers despatched from the main fleet for that purpose.

The fleet Commander expressed some surprise at the advanced methods of observation and tracking which the Terrans seemed to have developed, but so confident was he in the powers at his disposal that he did not even take it as a warning that he might expect more than a token resistance from the planets which were his prey, even had he thought so far ahead it is doubtful if he would have been sufficiently prepared for the full scale space battle in which his fleets soon found themselves engaged.

Earth and Venus were almost at their closest point of approach, and the Centaurans did exactly what the Terran tacticians had expected them to do, they decided to deal with the Earth first, and then proceed to Venus. A portion of the fleet, some six hundred heavy cruisers, was despatched to deal with Mars, and the remainder proceeded serenely on to Earth.

They passed, unsuspectingly, within a hundred thousand miles of Earth's single satellite, and had lined their fleets in ranks which pointed directly Earthward, when the blow fell. Their lack of observation was partly responsible for their downfall. Since they had passed the Moon without any sign of trouble they relaxed what little vigilance they had maintained, and did not see the three hundred Terran vessels which swooped on them from the shelter of the satellite, until it was too late.

Before they realised what had hit them the rear line of the fleet formation, sixteen ships, had vanished in the flaming holocaust of fire which the Terran fleet poured into them from the rear.

Quite apart from the demoralising effect which the sudden and unexpected appearance of such a fleet had upon them, the greater shock was encountered when the remainder of the fleet saw, with their own eyes, that their defences were of no use whatever against the Terran attack. The Commander, at the head of his force, watched with agonised horror as ship after ship behind him flamed to destruction, while the remainder scattered like autumn leaves before the gale of fire which the comparatively small Earth force poured at them.

It was not a battle, it was a rout, and there was such destruction done as only the Centaurans could have imagined before it occurred, and that only because they were to wreak it.

The Terran force attacked in three columns of one hundred ships each striking like lances straight through the ranked lines of their opponents. The flashes of atomic force-beams flickered like lightning over the hulls of the Centaurans ships, thrusting aside the protective screens, which were their main defence, as if they were cobwebs. Ship after ship vanished in a torrent of erupting flame which blinded the attackers as much as it blinded their prey.

Outnumbered as they had expected by ten to one, the crews of the Terran ships had grimly resolved themselves to almost certain death, and struck with the hand of death on their shoulders, determined to do as much damage as they could before themselves being wiped out. But the expected retaliation did not come; true a handful of Centauran ships turned to fight off the destruction engulfing them, only to find that their weapons were as useless as their defences. The attackers still came on, rocked by the forces flung at them, but otherwise unharmed.

For twenty minutes the chaos raged as ships and crews whirled in space in a fantastic kaleidoscope of flame and metal, the Terran fleet kept its essential form of three groups, twisting and turning through the Centauran formations in regular, paradelike movement, but the Centaurans scattered in vulnerable groups hardly knowing which way they went or friend from foe.

In twenty minutes it was all over, no fleet could have reformed into an effective force after the mauling the Centaurans had received, and the jubilant Earth ships ran riot through the demoralised groups of the enemy as they realised that they were, themselves, invulnerable. Sixteen ships only were lost, and those through accidental collisions with the Centauran ships, but of the three thousand which the enemy

sent against them, only four hundred and sixty fled from the scene of battle in terror, and those perished at the hands of the ambush fleet off Uranus.

Forty-seven ships landed on the Moon and surrendered to the Lunar Station, a hundred and seven more did likewise on Earth itself, and of the six hundred which flew towards Mars only thirty-two survived to give themselves up. It was the first and last great space battle within the Solar System, and it was over in exactly twenty minutes.

It was night at Lake Success, a clear moonlit night when the stars shone with an even clarity like a million tiny lamps on a giant Christmas tree. It was the night of battle, and all at the President's headquarters knew it, for the reports of the approaching Centauran fleets had been coming in for hours.

Brady had not left the main operations room for twelve hours, and with two score or more other officials he had watched with grim intensity as one by one the white bulbs on the detector board had flickered and gone out, each one denoting the destruction of another plotting station. No comment was made for there was no need, each man in that room had known for weeks exactly what would happen in the event of the enemy taking a certain line of action, and the fact that they were taking the line which would be most favourable to the Terran cause did not make it any easier to bear the loss and damage to the plotting stations without being able to hit back. The fears and doubts which had beset them for so long were growing in intensity, for apart from those tiny automatic stations they had no means of knowing what was going on. The three fleets had strict orders not to communicate with Earth or with each other until they had been either successful or defeated.

As the last light on the board went out there was a deep, quite unconscious sigh from the watchers. Brady's face was grim and strained as he looked at the clock, it was one-thirty in the morning, and within twelve hours success and failure would be dealt to one of them. He lit a cigarette and sat down to a long and fretful wait. Around him a score of others went about their jobs in silence or sat, like him, smoking, twiddling their fingers or scribbling aimlessly on pieces of paper. There was little or no conversation save for monosyllabic whispers or occasional expressions of disgust.

The pile of stubs mounted in the ashtray beside Brady's seat, and minute by minute, hour by hour the tension grew. It was three forty-five when a watcher on the electronic telescope reported flashes in the vicinity of the Moon.

Brady left his seat and crossed eagerly to the instrument.

"Let me see," he ordered.

The man slid over and relinquished the eyepiece to him.

"I've got it trained right on the largest group, sir," he said, "but even with this we can't get any greater magnification."

Brady had to wait a moment for his eyes to become accustomed to the black void showing in the eyepiece of the telescope, but after a moment, just as the operator had said, he could make out a vivid series of even flashes streaking the blackness of space. They were flashes which did not dim the stars, they were too weak for meteors, and too irregular.

He watched for a long minute while others, who had heard the news, came up and crowded round to learn what he could see. At last he lifted his head, and stood up, motioning to the operator to continue his observations. He looked up at the anxious circle of men around him, each face grimly questioning, some white with anticipation.

He nodded, "All hell is breaking loose out there by the look of it. There must be a battle going on about a quarter of a million miles out, it's the Moon fleet for sure, and the Centaurans are right on time."

There were muttered exclamations as he finished, but he waved them aside.

"I'm going to report to the President, if there is going to be trouble we should know in less than an hour, so if I'm not back send up a message as soon as anything breaks."

He pushed through the crowd and left the room, taking the elevator up to the penthouse where the President had his private suite. The guard on the door passed him through without hesitation and the secretary inside motioned him to go straight into the President's private office.

"He's like the rest of us, Captain, can't sleep."

Brady grinned wearily, he could well imagine.

Bannerman was standing by the window looking out at the myriad lights of the city below. The room was lit only by a small lamp on his desk. He turned as Brady entered, and said, "Hallo, Brady. What's the matter? Conscience keep you awake?"

"You too, sir?" returned Brady with a smile.

Bannerman laughed outright, "Sit down. In my case I shouldn't be at all surprised," he answered. "Conscience wasn't my strong point ever. How else do you think I got to be President?" He settled himself in another chair. "Well, I guess you've got some news otherwise you wouldn't be here at this unearthly hour."

"Yes, sir. There appears to be a space battle in progress some quarter of a million miles out. We can detect it through the electronoscope, but we can't make out the details. I thought you'd want to know about it."

Bannerman nodded. "So this is it," he said grimly. "How long do you think it'll be before we know anything definite?"

Brady shrugged, "Hard to tell, maybe an hour, maybe twelve. It all depends."

"On how good our boys are, is that it?"

"Yes."

"And how good those weapons are."

"Yes, sir, that more than anything," agreed Brady. "If they're not good enough, then it won't matter a damn how good our boys are. It won't matter at all." He voiced the conviction with almost determined gloom.

Bannerman sat back in his chair and swivelled it slightly until he was looking out of the window. He waved a hand towards it and said, "Take a look out there, Brady. I wonder if you see what I see?"

Brady followed his gaze. The lights of the city threw a dim, yellowish aura upward against the window, but even through that glow he could see the stars gleaming and winking against an ebony sky. Dawn was two hours away.

"Yes, sir, it's a lovely night," he replied.

"No, that's not what I mean, Captain," Bannerman shook his head. "I've been looking out of that window for over two hours waiting for you to come and give me some news. I've been watching the stars flickering out there, some of them brightly, some of them faintly, and for every one that I can see there are a thousand that I cannot.

"Out there is the greatest empire in the Universe, the greatest because it is just that, the Universe. Men have known of it and dreamed of it for over a thousand years, they have woven their ambitions about it, they have told stories about it, and they have worked for centuries with only one end in view, to conquer it. We are the lucky ones who may see the culmination of all the struggle and strife which has gone towards making those dreams come true, and tonight, out there, some of us are dying in an attempt to make it come to life, not because we are ready for it but because we have had it thrust upon us.

"We have reached our destiny a thousand years before it was due simply because others would not leave us in peace. Tonight we die, or tonight the human race becomes the greatest single force the Galaxy has ever known. I have been wondering if we are ready for it, if we are strong enough to hold it together, for if we are not, even though

we may beat the living daylights out of the Rihnans and their stooges, then the Galaxy will revert to uncivilised savagery, and we shall have destroyed the one thing which has kept it together for so long."

Brady stirred uneasily in his chair, he hadn't realised that Bannerman was such a deep thinker. All that he had said could be true, for the strength of the Three Planets was almost microscopic when compared with the estimated strength of the Rihnan empire.

"I don't think I'd worry about it, sir, we've got a long way to go before we reach that stage. The Centaurans are one thing, but the Rihnans—" he shook his head, "—they're a very different kettle of fish. My own view is, if we beat the Centaurans, then we shall be forced to come to an agreement with the Rihnans."

"Spheres of influence?" broke in Bannerman.

"Yes, something like that."

"I don't think so, such things never work out. We have our own lessons of history to tell us that, and I believe the Universe will become too small to hold both the Rihnans and ourselves, just as Earth became too small to hold the ancient national empires. The weakest went to the wall, and I think it will be the weakest who will go there in this case."

He stopped speaking abruptly as the phone on his desk buzzed. Brady rose and crossed to the desk, flicking up the switch which activated the intercom.

"President's office. Brady here."

"Captain Brady, Operations here," the voice was quick and excited. "Report from Lunar Station, sir. It reads, 'From Admiral commanding Terran Fleet Number One to the President. Enemy forces completely destroyed. They have ceased to exist as an effective fighting force. Survivors heading out towards Uranus. Unknown number have landed on Moon to surrender. Terran losses sixteen ships, enemy losses two thousand plus.' Message ends."

Brady's face was white with excitement, "Report received," he snapped. "Operations, I'm leaving this line open for further information. Shoot it straight through as soon as it comes to hand."

He turned to face Bannerman who was still sitting in his chair, his eyes looking distantly out through the window. As the President turned slowly towards him the phone buzzed briefly and the same voice called, "Report from Lunar Station. It reads, 'From Commander Lunar Station to President. Thirty-six ships of enemy classification so far landed to surrender, others still coming in. Report from Earth Fleet Number Two beamed from Phobos states four hun-

dred plus enemy ships destroyed in fifteen minute battle. Further report follows.' End of message."

Brady stood with eyes aflame, by the desk, his body literally trembling with excitement. Bannerman was still and silent in his chair, his eyes gleaming sombrely in the light from the desk lamp.

"Don't look so pleased, Captain," he remarked with a smile, "now, our troubles really begin."

"But we're over the first hurdle, sir," Brady's voice was high with excitement. "We've won the first battle, and that's what matters."

"The British disproved that," Bannerman said imperturbably. "They always won the last battle. That was why they became so great a power." He shook his head slowly. "No, now we can really start to worry. If we had lost then all our worries would have been over."

Brady was calming under the sobering influence of the President's deliberate unhurried analysis. He smiled, the flush fading from his cheeks.

"Sorry, sir, I got a little worked up. But you act as if you expected it?"

Bannerman smiled wryly, filling his pipe with calm unconcern.

"I did," he answered, and waved a hand towards the window, "it was all written out there, in the stars."

The desk phone buzzed.

"Message from Commander Lunar Station to President. 'Enemy flagship has surrendered together with six more vessels. Total now forty-five. Terran fleet is returning to base and is standing by for further orders. Mars fleet reports seven ships lost. Thirty-one of the enemy have so far surrendered.' End of message."

Brady turned from the phone. "It's all over bar the shouting."

Bannerman puffed thoughtfully at his pipe, his brow creased. He said, "I wonder?"

"You wonder what, sir?"

"Just an idea," he sat up suddenly and faced Brady. "Have that enemy flagship brought to Earth, Brady. I think we may be able to make use of it."

To be continued.

There is always a first time for everything but we didn't expect to wait so long for a Ted Sturgeon short story, especially after the success of his The Dreaming Jewels in Nova Novels. However, here it is at last, by the maestro of poetic prose who won the 1954 International Award with More Than Human.

THE CLINIC

By Theodore Sturgeon

Illustrated by QUINN

The police men and the doctors men and most of the people outside, they all helped me, they were very nice but nobody helped me as many-much as Elena.

De la Torre liked me very nice I think, but number one because what I am is his work. The Sergeant liked me very nice too but inside I think he say not real, not real. He say in all his years he know two for-real amnesiacs but only in police book. Unless me. Some day, he say, some day he find out I not-real amnesiac trying to fool him. De la Torre say I real. Classic case, he say. He say plenty men forget talk forget name forget way to do life-work but *por Dios* not forget buttons forget eating forget every damn thing like me. The Sergeant say yes Doc you would rather find a medical monstrosity



than turn up a faker. De la Torre say yes you would rather find out he is a fugitive than a phenomenon, well this just shows you what expert opinion is worth when you get two experts together. He say, one of us has to be wrong.

Is half right. Is both wrong.

If I am a fugitive I must be very intelligent. If I am an amnesiac I could be even intelligenter as a fugitive. Anyway I be intelligent better than any man in the world, as how could conversation as articulo-fluent like this after only six days five hours fifty three minutes?

Is both wrong. I be Nemo.

But now comes Elena again, de la Torre is look happy-face, the Sergeant is look watch-face, Elena smile so warm, and we go.

"How are you tonight, Nemo?"

"I am very intelligent."

She laughs. "You can say that again," and then she puts hand on my mouth and more laughs. "No, don't say it again. Another figure of speech . . . Remember any yet?"

"What state what school what name, all that? No."

"All right." Now de la Torre, he ask me like that and when I no him, he try and try ask some other how. The Sergeant, he ask me like that and when I no him, he try and try ask me the same asking, again again. Elena ask and when I no her, she talk something else. Now she say, "What would you like to do tonight?"

I say, "Go with you whatever."

She say, "Well we'll start with a short beer," so we do.

The short beer is in a room with long twisty blue lights and red lights and a noise-machine looks like two sunsets with bubbles and sounds unhappy out loud. The short beer is wet, high as a hand, colour like Elena's eyes, shampoo on top, little bubbles inside. Elena drank then I drink all. Little bubbles make big bubble inside me, big bubble come right back up so roaring that all people look to see, so it is bigger as the noise-machine. I look at people and Elena laugh again. She say, "I guess I shouldn't laugh. Most people don't do that in public, Nemo."

"Was largely recalcitrant bubble and decontrolled," I say. "So what do—keep for intestinals?"

She laugh again and say, "Well, no. Just try to keep it quiet." And now come a man from high long table where so many stand, he has hair on face, low lip flaccid, teeth brown black and gold, he smell as waste-food, first taste of mouth-thermometer, and skin moisture after drying in heavy weavings. He say, "You sound like a pig, Mac, where you think you are, home?"

I look at Elena and I look at he, I say, "Good evening." That what de la Torre say in first speak to peoples, after begin night. Elena quick touch arm of mine, say, "Don't pay any attention to him, Nemo." Man bend over, put hand forward and touches it to ear of me with velocity, to make a large percussive effect. Same time bald man run around end of long high table exhibiting wooden device, speaking the prognosis: "Don't start nothing in my place, Purky, or I'll feed you this bung-starter."

I rub at ear and look at man who smells. He say, "Yeah, but, you hear this little pig here? Where he think he's at?"

The man with bung-starter device say, "Tell you where you'll be at, you don't behave yourself, you'll be out on the payment with a knot on your head," and he walk at Purky until Purky move and walk

again until Purky is back to old place. I rub on ear and look at Elena and Elena has lip-paint of much bigger red now. No it is not bigger red, it is face skin of more white. Elena say, "Are you all right, Nemo? Did he hurt you?"

I say, "He is destroyed no part. He is create algesia of the middle ear. This is usual?"

"The dirty rat. No, Nemo, it isn't usual. I'm sorry, I'm so sorry. I shouldn't've brought you in here . . . Some day someone'll do the world a favour and knock his block off."

"I have behaviour?"

She say, "You what? Oh—did you act right." She gives me diagnostic regard from sides of eyes. "I guess so, Nemo. But . . . you can't let people push you around like that. Come on, let's get out of here."

"But then this is no more short beer, yes?"

"You like it? You want another?"

I touch my larynx. "It localizes a euphoria."

"Does it now. Well, whatever that means, I guess you can have another." She high display two fingers and big bald man gives dispensing of short beer more. I take all and large bubble forms and with concentration I exude it through nostrils quietly and gain Elena's approval and laughter. I say my thinks about the kindlies, about de la Torre and the Sergeant but it is Elena who helps with the large manymuchness.

"Forget it," she say.

"Is figure of speech? Is command?"

She say low-intensity to shampoo on short beer, "I don't know, Nemo. No, I guess I wouldn't want you to forget me." She look up at me and I know she will say again, "You'll never forget your promise, Nemo?" and she say it. And I say, "I not go away before I say, Elena, I going away."

She say, "What's the matter, Nemo? What is it?"

I say, "You think I go away, so I think about I go away too. I like you think about I here. And that not all of it."

"I'm sorry. It's just that I—well, it's important to me, that's all. I couldn't bear it if you just disappeared some day . . . What else, Nemo?"

I say, "Two more short beer."

We drink the new short beer with no talk and with thinks. Then she say she go powder she nose. She nose have powder but she also have behaviour so I no say why. When she go in door-place at back angle. I stand and walk.

I walk to high long table where stand the smelly man Purky, I push on him, he turn around.

He say, "Well look what crawled up ! What you want, piggy ?"

I say, "Where you block ?"

He say, "Where's *what* !" He speak down to me from very tall, but he speak more noise than optimum.

I say, "You block. Block. You know, knock off block. Where you block ? I knock off."

Big man who bring short beer, he roar. Purky, he roar. Mens jump back, looking, looking. Purky lift high big bottle, approach it at me swiftly. I move very close swiftlier, impact the neck of Purky by shoulder, squeeze flesh of Purky in and down behind pelvis, sink right thumb in left abdomen of Purky—one-two-three and go away again. Purky still swing down bottle but I not there for desired encounter now. Bottle go down to floor, Purky go down to floor, I walk back to chair, Purky lie twitching, men look at he, men look at me, Purky say "Uh-uh-uh," I sit down.

Elena come out of door running, say "What happened ? Nemo . . ." and she look at Purky and all men looking.

I say, "Sorry. Sorry."

"Did you do that, Nemo ?"

I make the head-nod, yes.

"Well what are you sorry about ?" she say, all pretty with surprise and fierce.

I say, "I think you happy if I knock block off, but not know block. Where is block ? I knock off now."

"No you don't !" she say. "You come right along out of here ! Nemo, you're dynamite !"

I puzzle. "Is good ?"

"Just now, is good."

We go out and big man call, "Hey, how about one on the house, Bomber ?"

I puzzle again. Elena say, "He means he wants to give you a drink."

"Short beer ?"

Big man put out short beer, I drink all. Purky sit up on floor. I feel big bubble come, I make it roar. I look at Purky. Purky not talk. Elena pull me, we go.

We walk by lakeshore long time. People foot-slide slowly to pulse from mens with air-vibrators, air-column wood, air-column metal, vibrating strings single and sets. "Dancing," Elena say and I say "Nice. Is goodly nice." We have a happy, watching. Pulse fast, pulse slow, mens cry with pulse and vibrations, womens, two at once, cry together. "Singing," Elena say, and the lights move on the dancing

red and yellow-red and big and little blue; clouds shift and change, pulse shift and change, stars come, stars go and the wind, warm. Elena say, "Nemo, honey, do you know what love is?"

I say no.

She look the lake, she look the lights, she wave the arm of her to show all, with the wind and stars; she make her voice like whisper and like singing too and she say, "It's something like this, Nemo. I hope you find out some day."

I say yes, and I have sleepy too. So she take me back to the hospital.

It is the day and de la Torre is tired with me. He fall into chair, wipe the face of he with a small white weaving.

He say, "*Por Dios*, Nemo, I don't figure you at all. Can I be frank with you?"

I say, "Yes," but I know all he be is de la Torre.

He say, "I don't think you're trying. But you must be trying; you couldn't get along so fast without trying. You don't seem to be interested; I have to tell you some things fifty times before you finally get them. Yet you ask questions as if you *were* interested. What are you? What do you want?"

I lift up the shoulders once, quickly, just like de la Torre when he not know.

He say, "You grasp all the complicated things at sight, and ignore the simple ones. You use terms out of *Materia Medica* and use them right, and all the time you refuse to talk anything but a highly individualized pidgin-English. Do you know what I'm talking about?"

I say, "Yes."

He say, "*Do you?* Tell me: what is *Materia Medica*? What is 'Individualized'? What is 'Pidgin-English'?"

I do the shoulders thing.

"So don't tell me you know what I'm talking about."

I turn the head little, raise the one finger like he do sometime, I say, "I do. I do."

"Tell me then. Tell it in your own words. Tell me why you won't learn to talk the way I do."

"No use," I say. Then I say, "No use for me." Then I say, "Not interest me." And still he sit and puzzle at me.

So I try. I say, "De la Torre, I see peoples dancing in the night."

"When? With Elena?"

"Elena, yes. And I see mens make pulse and cries for dancing."

"An orchestra?" I puzzle. He say, "Men with instruments, making noises together?" I make a yes. He say, "Music. That's called music."

I say, "What's this?" and I move my arms.

He say, "Violin?"

I say, "Yes. Make one noise, a new noise, a new noise—one and one and one. Now," I say, "what this?" and I move again.

"Banjo," he say. "Guitar, maybe."

"Make many noise, in set. Make a new set. And a new set. Yes?"

"Yes," he say. "It's played in chords, mostly. What are you getting at?"

I bump on side of head. "You have think word and word and word and you make set. I have think set and set and set."

"You mean I think like a violin, one note at a time, and you think like a guitar, a lot of related notes at a time?" He quiet, he puzzle. "Why do you want to think like that?"

"Is my thinks."

"You mean, that's the way you think? Well, for Pete's sake, Nemo, you'll make it a lot easier to convey your thinks—uh—thoughts if you'll learn to come out with them like other people."

I make the no with the head. "No use for me."

"Look," he say. He blow hard through he nostrils, bang-bang on table, eyes close. He say, "You've got to understand this. I'll give you an example. You know how an automobile engine works?"

I say no.

He grab white card and markstick and start to mark, start to conversation swift, say all fast about they call this a four-cycle engine because its acts in four different phases, the piston goes down, this valve opens, that valve closes, the piston goes up, this makes a fire . . . and a lot, all so swift. "This the intake cycle," and many words. "This is the crankshaft, sparkplug, fuel line, compression stroke . . ." Much and much.

And stops, whump. Points markstick. "Now, you and your thinking in concepts. That's how it works, basically. Don't tell me you got any of that, with any real understanding."

"Don't tell?"

"No, no," he say. He tired, he smile. He say, "Name the four cycles of this engine."

I say, "Suck. Squeeze. Pop. Phooey."

He drop he markstick. A long quiet. He say, "I can't teach you anything."

I say, "I not intelligent?"

He say, "I not intelligent."

Is many peoples in eatplace but I by my own with my plate and my thinks, I am alone. Is big roughness impacting on arm, big noise say, "What's your *name*?"

I bend to look up and there is the Sergeant. I say "Nemo."

He sit down. He look. He make me have think: he like me, he not believe me. He not believe anybody. He say: "Nemo, Nemo. That's not your name."

I do the thing with the shoulders.

He say, "You weren't surprised when I jolted you then. Don't you ever get surprised? Don't you ever get sore?"

I say, "Surprise, no. Sore?"

He say, "Sore, mad, angry."

I have a think. I say, "No."

He say, "Ought to be something that'll shake you up. Hm . . . They pamper you too much around here, you walking around like Little Eva or Billy Budd or somebody. Sweetness and light. Dr. de la Torre says you're real bright."

"De la Torre real bright."

"Maybe, maybe." He eyes have like coldness, like so cold nothing move. He say, "That Elena. How you like Elena, Nemo?"

I say, "I like." And I say, "High music, big colour-gentle."

He say, "Thought so." He poke sharp into my chest. "Now I'm gonna tell you the truth about your Elena. She's crazy as a coot. She went bad young. She was a mainliner, understand me? She was an addict. She did a lot of things to get money for the stuff. She had to do more'n most of 'em, with a face like that, and it didn't get any prettier. De la Torre pulled her through a cure. He's a good man. Three different times he cured her.

"So one time she falls off again and what do you know, she picks up with a looney just like you. A guy they called George. I figured from the start he was a faker. Showed up wandering, just like you. And she goes for him. She goes for him bigger'n she ever went for anything else, even hash. And he went over the hill one fine day and was never seen again.

"So she's off the stuff, sure. And you know what? The only thing she has any use for is amnesiacs. Yeah, I mean it. You're the sixth in a row. They come in, she sticks with 'em until they get cured or fade. Between times she just waits for the next one.

"And that's your Elena. De la Torre strings along with her because she does 'em good. So that's your light o' love, Nemo boy. A real twitch. If it isn't dope it's dopes. You get cured up, she'll want no part of you. Wise up, fella."

He looked at me. He has a quiet time. He say, "God awmighty, you don't give a damn for her after all . . . or maybe you just don't know how to get mad . . . or you didn't understand a word of what I said."

I say, "Every people hurt Elena. Some day Elena be happy, always. Sergeant hurt every people. Sergeant not be happy. Never."

He look at me. Something move in the cold, like lobster on ice ; too cold to move much. I say, "Poor Sergeant."

He jump up, he make a noise, not word, he raise a big hand. I look up at him, I say, "Poor Sergeant." He go away. He bump de la Torre who is quiet behind us.

De la Torre say, "I heard that speech of yours, you skunk. I'd clobber you myself if I didn't think Nemo'd done it better already. You'd better keep your big flat feet the hell out of this hospital."

Sergeant run away. De la Torre stand a time, go away. I eat.

It is night by the lake, the moon is burst and leaking yellow to me over the black alive water and Elena by me. I say, "I go soonly."

She breathe, I hear.

I say, "Tree finish, tree die. Sickness finish, sickness gone. House finish, workmens leave. Is right."

"Don't go. Don't go yet, Nemo."

"Seed sprout, child grow, bird fly. Something finish, something change. I finish."

She say, "Not so soon."

"Bury plant ? Tie boy to cradle ? Nail wings to nest ?"

She say, "All right." We sit.

I say, "I promised."

She say, "You kept your promise, Nemo. Thank you." She cry. I watch leaking moon float free, lost light flattening and flattening at the black lake. Light tried, light tried, water would not mix.

Elena say, "What world do you live in, Nemo ?"

I say, "My world."

She say, "Yes . . . yes, that's the right answer. You live in your world, I live in my world, a hundred people a hundred worlds. No'ody lives with me, nobody. Nemo, you can travel from one world to another."

I do the head, yes.

"But just one at a time. I'm talking crazy, but you don't mind. I had a world I don't remember, soft and safe, and then a world that hurt me because I was too stupid to duck when I saw hurt coming. And a world that was better than real where I couldn't stay, but I had to go there . . . and I couldn't stay . . . and I had to go . . . and

then I had a world where I thought, just for a little while—*such* a little while—I thought it was a world for me and . . .”

I say, “—and George.”

She say, “*You can read my mind!*”

“No!” I say, big; loud. Hurt. I say, “Truly no, not do that, I can’t do that.”

She touch on my face, say, “It doesn’t matter. But George, then, about George . . . I was going to be lost again, and this time forever, and I saw George and spoke right up like a—a—” She shake. “You wouldn’t know what I was like. And instead, George was gentle and sweet and he made me feel as if I was . . . well and whole. In all my life nobody ever treated me gently, Nemo, except Dr. de la Torre, and he did it because I was sick. George treated me as if I was healthy and fine, and he . . . admired me for it. And he came to love me like those lights, those lights I showed you, all the colours, slipping among the dancers under the sky. He came to love me so much he wanted to stay with me for ever and ever, and then he went away sometime between a morning and a snowstorm.”

The moon is gone up, finished and full, the light left on the water frightened and yearning to it, thinning, breaking and fusing, pointing at the moon, the moon not caring, it finished now.

She say, “I was dead for a long time.”

She passes through a think and lets her face be dead until she say, “Dr. de la Torre was so kind, he used to tell me I was a special princess, and I could go anywhere. I went in all the places in the hospital, and I found out a thing I had not known; that I had these hands, these legs, eyes, this body, voice, brains. It isn’t much and nobody wants it . . . now . . . but I had it all. And some of those people in there, without all of it, they were happier than I was, brave and good. There’s a place with people who have their voices taken out of their throats, Nemo, you know that? And they learn to speak there. You know how they do it? I tell some people this, they laugh, but you won’t laugh. You won’t laugh, Nemo?”

I am not laugh.

She say, “You know that noise you made when you drank the beer so fast? That’s what they do. On purpose. They do it and they practice and practice and work hard, work together. And bit by bit they make a voice that sounds like a voice. It’s rough and it’s all on one note, but it’s a real voice. They talk together and laugh, and have a debating society . . .

“There’s a place in there where a man goes in without legs, and comes out dancing, yes twirling and swirling a girl around, her ballgown a butterfly and he smiling and swift and sure. There’s a place

for the deaf people, and they must make voices out of nothing too, and ears. They do it, Nemo ! And together they understand each other. Outside, people don't understand the deaf. People don't mean to be unkind, but they are. But the deaf understand the deaf, and they understand the hearing as well, better than the hearing understand themselves.

" So one day I met a soldier there, with the deaf. He was very sad at first. Many of the people there are born deaf, but he had a world of hearing behind him. And there was a girl there and they fell in love. Everyone was happy, and one day he went away.

" She cried, she cried so, and when she stopped, it was even worse.

" And Dr. de la Torre went and found the soldier, and very gently and carefully he dug out why he had run away. It was because he was handicapped. It was because he had lost a precious thing. And he wouldn't marry the girl, though he loved her, because she was as she had been born and he felt she was perfect. She was perfect and he was damaged. She was perfect and he was unfit. And that is why he ran away.

" Dr. de la Torre brought him back and they were married right there in the hospital with such fine banquet and dance; and they got jobs there and went to school and now they are helping the others, together . . .

" So then I went into another world, and this is my world ; and if I should *know* that it is not a real world I would die.

" My world is here, and somewhere else there are people like us but different. One of the ways they are different is that they need not speak; not words anyway. And something happens to them sometimes, just as it does to us: through sickness through accident, they lose forever their way of communicating, like our total deaf. But they can learn to speak, just as you and I can learn Braille, or make a voice without a larynx, and then at least they may talk among themselves. And if you are to learn Braille, you should go among the blind. If you are to learn lip-reading you do it best among the deaf. If you have something better than speech and lose it, you must go among a speaking people.

" And that is what I believe, because I must or die. I think George was such a one, who came here to learn to speak so he could rejoin others who also had to learn. And I think that anyone who has no memory of this earth or anything on it, and who must be taught to speak, might be another. They pretend to be amnesiacs so that they will be taught *all* of a language. I think that when they have learned, they understand themselves and those like them, and also the normal

ones of their sort, better than anyone, just as the deaf can understand the hearing ones better.

"I think George was such a one, and that he left me because he thought of himself as crippled and of me as whole. He left me for love. He was humble with it.

"This is what I believe and I can't . . ."

She whisper.

". . . I can't believe it . . . very much . . . longer . . ."

She listen to grief altogether until it tired, and when she can listen to me I say, "You want me to be George, and stay."

She sit close, she put she wet face on my face and say, "Nemo, Nemo, I wish you could, I do *so* wish you could. But you can't be my George, because I love him, don't you see? You can be my de la Torre, though, who went out and found a man and explained why and brought him back. All he has to know is that when love is too humble it can kill the lovers . . . Just tell him that, Nemo. When you . . . when you go back."

She look past me at the moon, cold now, and down and out to the water and sky, and she here altogether out of memory and hope-thinks. She say with strong daytime voice, "I talk crazy sometimes, thanks, Nemo, you didn't laugh. Let's have a beer some time."

I wish almost the Sergeant knows where I keep anger. It would please him I have so much. Here in the bare rocks, here in the night, I twist on anger, curl and bite me like eel on spear.

It is night and with anger, I alone in cold hills, town and hospital a far fog of light behind. I stand to watch it the ship and around it, those silents who watch me, eight of them, nine, all silent.

This is my anger: that they are silent. They share all thinks in one thinking instant, each with one other, each with all others. All I do now is talk. But the silents, there stand by ship, share and share all thinks, none talks. They wait, I come. They have pity.

They have manymuch pity, so I angry.

Then I see my angry is envy, and envy never teach to dance a one-legged man. Envy never teach the lip-reading.

I see that and laugh at me, laugh but it stings my eyes.

"Hello!"

One comes to me, not silent, but have conversation! Surprise. I say, "Good evening."

He shake hand of me, say, "We thought you were not going to come." His speak slow, very strong, steadily.

I say, "I ready. I surprise you have talk."

He say, "Oh, I spent some time here. I studied very carefully. I have come back to live here."

I say, "You conversation goodly. I have learn talk idea, good enough. You have word and word and word, like Earth peoples. Good. Why you come returning?"

He look my face, very near, say, "I did not like it at home. When you go back there, everyone will be kind. But they will have their own lives to live, and there is not much they can share with you any more. You will be blind among the seeing, deaf among those who hear. But they will be kind, oh yes: very kind."

Then he look back at the silents, who stand watching. He say, "But here, I speak among the speaking, and it is a better sharing than even a home planet gone all silent." He point at watchers. He laugh. He say, "We speak together in a way they have never learned to speak, like two Earth mutes gesticulating together in a crowd. It is as if we were the telepaths and not they—see them stare and wonder!"

I laugh too. "Not need to telepath here!"

He say, "Yes, on Earth we can be blind with the blind, and we will never miss our vision. While I was here I was happy to share myself by speaking. When I went home I could share only with other . . . damaged . . . people. I had to go home to find out that I did not feel damaged when I was here, so I came back."

I look to ship, to wondering silents. I say, "What name you have here?"

He say, "They called me George."

"I think, I have message for you: Elena dying for you." I say, "Elena waiting for you."

He make large shout and hug on me and run. I cry, "Wait! wait!" He wait, but not wanting. I say, "I learn talk like you, word and word, and one day find Elena for me too."

He hit on me gladly, say, "All right. I'll help you."

We go down hill togetherly, most muchly homelike. Behind, ship wait, ship wait, silents watch and wonder. Then ship load up with all pity I need no more, scream away up to stars.

I have a happy now that I get sick lose telepathy come here learn talk find home, *por Dios*.

Theodore Sturgeon.

Most stories which deal with an alien intelligence infiltrating into Earth's atmosphere presupposes that Man would not know about it until too late. But assume that its arrival is known and that it is adaptable to any form of life—how combat it ?

CONSOLIDATION AREA

By Francis G. Rayer

The sentience, alien beyond the comprehension of Man, felt the speed of its tiny globe increase as it entered a strongly rising gravitational field. Exultation filled it, and relief that the long journey was almost over. Its tiny, indestructible sphere had sped the length of many universes, threading a way from its infinitely remote point of origin. While centuries began and ended it had raced on, not lonely because of the tenuous companionship of contact with other minds akin to its own. Ahead of it other tiny spheres had swept into the system; behind it, others came, a drawn-out string of glinting beads. Triumph had filled the minds ahead—they had achieved successful planet-fall.

The sentience rearranged the molecular structure of part of the tiny sphere and the wall grew transparent. A green planet eclipsed the field of view, nearing. Waves foaming upon a seashore swept behind; dark brown and green grew into a forest, and the forest into tall trees fringing a lake. Under the alien's control the molecules of the globe gripped, braking, on the planet's gravitational field, slowing descent. Waters opened, cushioning the fall, and all motion ceased as the sphere struck bottom.

The sentience lay for a long time resting from the shock, and seeking through its surroundings with increasing circles of awareness. Dim forms moved in the lake, minds occupied with vague and lowly thoughts. Fish. Not here was a good life-form to adopt, the alien decided. It tried to contact those of its fellows who had come before, but failed. Doubtless they had adopted native life-forms, it decided. Several planetary rotations existed between the arrival of each.

It must be patient, it decided. But patience was difficult after waiting so long. It opened the sphere and rose to the lake surface, bobbing there and scanning its surroundings. Sun shone through the trees, and a small beaked creature waded in the water among reeds. The alien scanned it keenly. It was quick, mobile, and its mind images showed it could fly. Its intelligence was limited, inarticulate with a simplicity that showed it was not the predominant species. Yet it should do, for the present.

The tussle for entry was brief, the victory complete. The alien beat the bird's core of awareness back and back, into unconsciousness, then into death. The conflict over, it stood in the shallows, looking out with its new power of vision, listening with ears that had become its own. The planet was very different, experienced thus.

Albert Mademann wound up his fishing line and put his gear away. Steel-shod boots kicking through the leaves, he made his way along the lake side, reflecting that he had three more weeks holiday away from the noise of 20th century civilisation. Then back by copter to the great city . . .

He halted, watching a small wading bird that stood in the shallows and showed no fear. Before, all water-birds had at once flown at his coming. This one was *different*. It was not injured, yet did not fly. Abruptly Albert knew it was exactly the creature he sought, to be a pet in his fishing cabin during the remaining weeks.

It ate the crumbs he threw, watching him with quick eyes. He squatted by the water, and it ate from his hand. He lifted it, and took it back to his cabin. There, he put it a plate of scraps, and remembered he must phone.

The radiophone channel was already free, and a voice he recognised came at once from the city fifty miles away.

"Captain Penvenny here."

"Mademann here." Albert wondered at the interest in Penvenny's tones. "Anything special turned up? I remembered I promised to phone."

"Nothing special," Penvenny said. "And with you?"

"All as usual. Caught a nine-pounder this morning. Got a wader-bird as pet."

"A wader-bird? Aren't they hard to catch?"

"Not this one."

A pause, then: "Glad you're enjoying it. I'll be along this evening as promised."

The carrier faded and Albert returned hurriedly to his living room. He did not remember Penvenny had promised to call, but supposed he had overlooked it. Just as he had overlooked the big, half-wild yellow tomcat he had befriended, he thought.

He need not have feared. Some instinct had prompted the wader-bird to a perch upon the top of his bookcases, where it stood returning stare for stare with the old yellow tom.

Albert smiled and put the cat out with milk, closing the door. There looked liked being a conflict of loyalties for old Sam, but when he was full of milk his predatory instincts suffered.

The alien watched from the top of the bookcase as Albert returned. Its first choice of life-form had not been wise, it realised. The habitat of the wader-bird was upon the lake-side. It had no means of maintaining its safety inside the human's dwelling, or competing on equal terms with life-forms such as the silent-footed yellow quadruped. Most suitable for adoption would be the human, the alien decided. Yet undue haste would be dangerous. The human was civilised, and obviously conformed in activity to complex patterns. Its behaviour must be studied. Only then would it become a safe host, possibly able to return to some centre where others of its kind lived. Culture errors must be avoided.

The alien sought the window, and examined the world beyond. A road vanished amid the trees. Its surface spoke of high-speed travel, which indicated a highly able primary species. It wondered if the human were the predominant or most important life-form. If not, it should at least afford a useful stepping-stone.

The yellow quadruped was licking its fur. It seemed on good terms with the human, who had fed it, the alien decided, and also appeared able to maintain itself with safety in the vicinity of the cabin. It might form a useful intermediate step.

Later, the door was set open and the wader-bird flew to a near-by tree. No indication of the whereabouts of its fellows came to the sentience occupying the bird's mind, but that was not unanticipated. The same difficulty in communication always arose when indigenous life-forms were occupied, especially when the telepathic ability of the brain was dormant, unused and undeveloped.

The alien circled the cabin, noting signs of manufacturing ability. The road drew its eyes often, but it knew a hasty move could invite death. If the road led to a city, there would be the perfect hiding place—but not until the culture and customs of the species occupying it were well understood.

A sound of infinite softness aroused the bird. The yellow tom was looking over the rooftop. The alien flew back to its original branch quickly. It had not realised the quadruped had sufficient agility to scale the cabin. The cat halted under the tree after it had sprang from the cabin roof, and the alien sat staring down at it, motionless, judging the best moment. Once, the human looked from the cabin, called "Sam!" and threw a stone, but the cat came back when he withdrew.

Stretching, Albert Mademann roused from the easy-chair and mixed a drink. Captain Penvenny should soon arrive, giving the chance of a gossip. Bit lonely in the woods, sometimes, though Albert was not the sort to bother much about that.

He went out to see if his lines were dry for reeling, and swore. Grey and green feathers were scattered a few paces from the door. He grunted.

"Never should have trusted that animal . . ."

The sound of tyres on the road took him round the cabin. Captain Penvenny was alighting, spruce in field-grey, little more than forty, but with eyes like cold steel.

"How do, Mademann?" He waved, smiling.

Albert waited for him. "Damn cat killed my wader-bird."

Dismay, even momentary terror, showed on Penvenny's rugged face. He halted in mid-stride.

"When? How?"

"Didn't see how. Half an hour ago, I'd say, when I was napping."

The colour had certainly flown from his visitor's cheeks, Albert noted. He himself felt little emotion. Never did—always best to take things much as they came, he thought.

Penvenny licked his lips like a man very much afraid. "I'd have liked to see that bird, Albert?"

Albert shrugged, an automatic gesture, and his mind clicked to other things. There was a lot to tell Penvenny. He talked about the big fish he had taken, and was not sure that Penvenny was really listening. He told of his explorations through the woods—and was sure he was not listening.

"This the cat?" Penvenny asked.

It sat just beyond the open door, regarding them placidly. Raising a paw, it licked it, but the action looked awkward to Albert's eyes, trained to observe normality, and baulk at deviations, however slight. An inexplicable unease came to him, fading as his ready mind found a reason.

"That's him—and he's eaten too much, judging by the look of him."

"The wader-bird?"

"I'd say so."

Albert felt his interest in the subject wane. Everything here was *normal*. His mind clicked back into its accustomed track.

"Water's just right temperature for them big fish," he said.

The cat watched them talking, and watched Captain Penvenny leave. Albert went indoors, and it followed, sitting at the foot of the bookcase. Albert had a drink, and stood watching it, swishing the dregs in the bottom of his glass. There was always a draught by the bookcase, this time of evening. Sam never sat there. *Sam never sat there!* An unease began to grow in Albert's mind. Abruptly the unease spilled over. Almost as if a switch had been closed in his head he knew that here was something *odd*.

He dialled the radiophone. "Captain Penvenny back yet?"

A long delay, then: "No, sir."

Fear edged the clerk's voice. Albert drained the glass, wondering why. "Give him a message when he comes in."

"Yes, sir."

"Tell him Sam doesn't sit in his usual place."

"Yes, sir."

The fear was stronger. Albert rang off. Now that the message had been given the conflict in his mind faded. Tranquil, he stood in the open door, watching the light go. That it might be strange that the clerk had taken his message without repetition did not occur to him.

Dusk was near when the radiophone buzzed. Captain Penvenny was at the other end. "I got your message." He repeated it. "That right?"

"Just as I said." The matter now seemed one of no importance to Albert. The conflict had gone.

"Sam still there?"

Albert squinted through the door. "Sure—"

"Will you keep him in—shut the door and windows?"

"Of course, if you say."

"Please do." Relief lay mixed with something else in Penvenny's voice. "I'll be along early morning, to talk things over with you."

"Thanks. Do that."

Albert rang off, saw that Sam was in, and closed the door. It seemed stuffy and he decided a walk in the moonlight would clear his head. Sam tried to follow him out, but Albert shoved him indoors roughly and banged the door.

The moon was full and bright, making grass and trees silver. Albert walked slowly towards the lakeside, sorry he had no right to fish at night. He stood motionless as rock, listening to the sounds that showed tiny creatures were about in the woods. A weasel came past, back high, unafraid until he moved a steel-shod boot in the leaves. Then it sprang from sight, but a louder noise approached, hesitated, then grew to a rustle at his elbow.

A girl stood in the moonlight, golden hair hanging around her shoulders. She was slender, young, and breathing a little heavily. Possibilities integrated in Albert's mind.

"You're lost."

She nodded, lips twitching. "My auto had a breakdown back on the top road. I thought I could cut across."

Albert remembered the top road, fully seven miles away. "Other folk have tried that. It's not easy by day. By night it's impossible."

"What'll I do?"

She was very tired, Albert noted. "Stay in my cabin, if you like." He smiled. *Young girl; young man; alone in cabin—not permitted.* "I'll stay outside, of course. Prefer it, this weather."

She studied his face, and seemed relieved. "I'd be glad if you could—"

He turned up the path, looking back over a shoulder. "You must be tired, but make yourself some tea, if you like."

She followed closely, often looking around at the whispering trees. "My name's Birdie Cairns."

"I'm Albert—Albert Mademann. Captain Penvenny, a friend will be here early. He can take you back. If you want to tell anyone you're safe, use the phone." He watched her enter, doubting if anyone would fetch her broken auto before morning, even if she asked. It was fifty miles round by road to the spot. Just before shutting the door he remembered. "Sorry I'll have to ask you to keep everything closed, to stop old Sam getting out."

At the edge of the clearing was the hammock he sometimes used hot afternoons. Albert stretched, and lay down on its stout mesh. With the horizontal position and rest, the activity of his mind began to fall sharply, diminishing to a semi-awareness near to sleep.

In the dusky gloom the alien stole soft-footed through the connecting door. The girl saw him and snapped her fingers.

"You old Sam?"

The alien felt uneasy. He had not observed the quadruped's reactions to such an incident, and therein lay the danger always present when a strange life-form was adopted. Nevertheless, it appeared the quadruped was given to sleep and inactivity, and the alien lowered himself upon the floor, closing one eye, then the other. Pleasure suffused him at the change he had made. The quadruped's vision was acute, its brain larger, and no apparent danger threatened it. It was accepted into the cabin, and the arrival of yet another creature of human form indicated that here was the predominant species of the planet. As Sam, his first act had been to eat the wader-bird, already dead because deprived of mind both natural and alien. From Sam's original actions, the alien was sure the performance was appropriate, and observation of its effect had proved this to be so. Now, it watched the girl, noting every movement. Possibly she would form a good subject for initial trial, the alien decided. When he finally entered any place where many humans were he must be so competent that no slip arose.

When she put out the light the window was a mere dim oblong. The alien sentience stirred, rose, and jumped softly to the couch. It longed for a more suitable host. The quadruped's memories were few, and of a nature unsuitable for use. Much of its activity was based on instincts deep in the lowest subconscious, and not available. Its cerebral paths were relatively few, its body of a type that could not possibly gain any significant place on the planet. Already its field of usefulness had ended, the alien decided.

Captain Penvenny grated back his swivel chair and stood up. "I'd have gone out there again at once except for this meeting!" he stated. "Now you keep me discussing imponderables!"

Two men of equal rank, and one superior, occupied a tiny semi-circle of chairs before the desk. The superior officer looked very worn.

"There has been at least half-a dozen objects strike that area?"

The man at his right nodded. "At least. A watch was kept after the military radar camp noted one down. Its change of velocity was in no way that of a meteorite. Furthermore, that each has struck approximately the same spot, at four-day intervals, demonstrates some purposive agency."

"There could have been others, earlier?"

"I think not, sir. Radar would have noticed."

Penvenny wiped his brow and found cold sweat on his hand. "We've been over all this a hundred times! Do you realise that the lake is

only fifty miles away, and that here we have a city of three million people! If *something* slips in here, our chance of finding it will be exactly that—one in three million."

His superior gnawed a lip. "This cat?"

"Locked in. It's only the knowledge that Albert will obey me to the letter that lets me stay here until dawn. Except for that, conference or no, I'd be there—"

Penvenny sank into silence, thoughts deep and bitter. A man would drive himself hard when fear was at his heels, and he would not deny the fear was there, just as upon the three faces opposite. It was devilishly difficult to fight the unknown, he thought bleakly. Thoughtless action might scatter their quarry—if quarry there was . . .

"I haven't slept for two days, gentlemen," he said.

They rose, murmuring apologies.

When the door closed, Penvenny sat staring at his blotter. Since Radar sounded the alarm, no man had come out of the forest. The area was contained by every artifice of military and air power. Fifty thousand troops circled it and darkness was never allowed to descend upon any road, lane or field around the forest. Yet still he was uneasy. *Something* might slip through in a guise other than man, or in some unfathomable way elude capture. That a human being *not human* might try to leave the forest was a point heavily debated. Yet if *something* had come, it would realise Man was the supreme life-form of the planet. Therefore no man, except he himself, must be allowed to leave the area alive.

Other creatures might succeed. Birds, animals of the forest. That, too, had been debated. It was a loophole, yet might not be significant. In Penvenny's opinion *anything* that had landed in the forest would have intelligence enough to realise, or discover, that lowly life-forms could accomplish little.

The phone brought his head from his hands. "Penvenny here."

"This is Captain Monrose, on the hill sector. I've bad news."

Penvenny groaned, fingers iron on the switch. "Yes."

"A girl's got into the area. Apparently she's been camping. She was told a military exercise was in progress, and asked to leave. She drove away, then halted on the top road. After a long time a man was sent along, and he found she had gone. Apparently the car had broken down and she left it, going down on foot."

Penvenny swore. "Couldn't you find her?"

"She'd been gone at least half an hour when we found the car was unoccupied. We went as far as we could, but did not enter the primary area. Your orders—"

"Quite correct, Captain."

Penvenny released the switch. A girl. She could never leave, alive. No human in that area could ever be permitted to leave, alive, now. He must remember to take Albert more fishing lines and things, if he wanted them . . .

Morning sun glinted on the edge of the forest. Albert noted it, but felt little—things like that did not seem to mean much, usually. He watched Penvenny close the car door, and walked to him.

"Morning, Captain. Old Sam's dead."

Grey chased the pale away from Penvenny's cheeks. His tightly compressed lips twitched. "I'm sorry, Albert. How?"

"Over-eating or old age, I suppose." Albert felt regret at the passing of the old yellow tom. The body had been stiff and cold by the bookcase. He had carried it to the edge of the clearing, not burying it in case Captain Penvenny wanted to see. Then he had shrugged. After all, it was unimportant . . .

A spasmodic contraction of muscles twisted Penvenny's face. "Seen a young woman about?"

Albert nodded. "Birdie Cairns. Her car broke down and she's been in the cabin all night."

Penvenny said something inaudible, an oath of extreme bitterness. "She still here?"

"Yes. I think she'd like you to take her back to the city."

Penvenny's lips seemed to form the phrase *I'll be damned if I do!* But he smiled. "We'll see."

They went round the cabin, and Albert saw the golden-headed girl was standing in the doorway, watching them. She was quieter, more controlled, than the previous evening. Her spontaneity appeared to have fled. She greeted Captain Penvenny soberly, explained why she had left her car, and asked for a lift back.

Penvenny's gaze seldom strayed from her face. "Don't think I can, this morning, Miss Cairns. I have to go on to see the forces manoeuvring beyond the top road. It's a big military exercise."

Watching, Albert thought that some secret understanding passed between the two. Birdie Cairns seemed to withdraw more into herself, defensive, yet with something fiercely dangerous in her manner. Simultaneously Penvenny's face assumed a forbidding grimness, locking every muscle and line into granite.

"If you care to wait until evening, I can take you then," he murmured.

A tiny frown crossed the girl's face. "Perhaps I should phone for someone—"

The granite of Penvenny's face was creased by a stony smile. "I doubt if the authorities will allow them in. Our exercise is covering a big area and orders are very definite."

"Very well."

She shrugged and went in, and Albert wondered why sweat shone on Penvenny's brow. They talked a while. Penvenny walked jerkily round the cabin, gaze flickering everywhere. When they emerged to sight of the car, Birdie Cairns was just walking away from it. Penvenny's hand went into his pocket, and Albert heard keys jangle.

After half an hour Penvenny unlocked the car and started it. "I'll be back this evening."

Albert watched him go. Never had he seen a man's face so grim, so lined with conflict and fear. Just before going Penvenny had smiled. "Probably you'll be able to stop here fishing a lot longer than you expected, Albert."

Beside the cabin, the alien watched the car pass from view. It felt both triumph and unease. The adoption of the girl as host had been a trifle more difficult. Her mind had rebelled fiercely, but had eventually succumbed. A considerable store of useful memories existed in those levels of her mind which the alien could reach. Of particular interest were recollections of a great city, where sleek vehicles sped amid noble buildings, and aircraft rose from flat roofs and wide landing strips. Memories of the way in which to manipulate a vehicle like Captain Penvenny's also existed and bitter disappointment had arisen at finding the car locked. In the deepest heart of its awareness, the alien sentience knew that it must reach that city. It was no longer safe near the lake. If escape as Birdie Cairns proved impossible, another human was near at hand . . .

The girl's eyes turned upon him. Perhaps thirty, he was tall, muscular, well-built, with long arms now extended to fit the sections of a rod. He should, the alien decided, be an ideal specimen in which to enter the city.

Albert started at the quiet step near him. His attention had been directed upon assembling the rod, and no real awareness had been available for other things. She halted a few paces from him and he examined her. Pretty, judged by his own subjective standards. Quick-eyed, well-built—a young woman with strength and wit. As he studied her the rod was forgotten, and a tenuous unease began to ebb into his mind.

"The radiophone won't work," she said.

The information washed through his brain and evoked response: "It was all right yesterday."

"Broken down, I suppose."

Evaluation, decision, response : *a lie*. Inform her she lied? No. Albert smiled. "I'll tell Captain Penvenny when he comes."

The unease in his mind grew, mounting like seas beyond a dam. Birdie Cairns had lost her quick spontaneity and in its stead was a calculated watchfulness. Albert knew he should have noticed it fully while Penvenny was there, but he had not. Now, he wanted to tell Penvenny. The unease keyed that reaction : *Tell Penvenny*. He propped the rod against a bush, not noticing it fell.

"Think I'll try the phone."

His steel-shod boots thudded on the turf, but lighter feet had caught up with him by the time he gained the cabin.

"*The phone won't work*," Birdie Cairns said.

A lie, a lie! his brain screamed. He smiled. "Perhaps you didn't handle it right."

He thought she was going to try to hold him back. Instead her gaze passed over him, as if evaluating their respective physiques, and she let him pass through the inner door.

The phone was dead. Without moving he saw that a flexible lead had been pulled free from the wall equipment. The sea of unease rose, and reached a critical level. He spun round, the inner dam breaking, and felt something snap, almost the electrical *click* of an opening switch, in his mind. Simultaneously he saw that Birdie Cairns was crumpled on the floor, and that *something* was moving from her towards him, like an oscillating bumble-bee driven by some unquenchable purpose. Conflict and terror filled his mind, ceasing as consciousness went and his limbs crumbled.

Stones shot from under his wheels as Penvenny swung round to a halt by the cabin. He locked the car door and ran—locked it because one could not be *sure* . . . A moment's oversight could nullify preparation that had taken into account everything, including a relay that radiated an instant warning when the radiophone flex was broken. Penvenny knew Albert would not have broken it. The act would have been impossible.

There had been so little time to prepare, he thought as he ran to the cabin. Tiny streaks in the heavens that slowed in a way no meteorite ever did, so spaced as to overcome planetary rotation, always landing within a quarter mile of each other, around the lake. Mankind's reaction had been immediate. No living thing but he himself had gone out of the area since its isolation. Nor must it. Penvenny went chill when he remembered how near he had been to leaving the car unlocked upon the previous visit, and how Birdie Cairns had tried

the door. Her presence had complicated everything immeasurably—he might have let her leave the area, in error; or kept her, without justification. It could be a mistake either way.

The cabin stood silent. A rod lay near a bush. Inside, near the radiophone, Albert Mademann was crumpled in an immobile heap. Just beyond the connecting door between the rooms lay the girl, and Penvenny knew she was dead.

A mixture of cold fear and icy triumph swept into Penvenny's mind. Stiff as if on parade, he strode to the second room, his face bleak and his lips compressed, white from pressure of facial muscles and knowledge of the terrible danger he must defy.

He bent, jerked up Albert's jersey, then back a pace, waiting . . .

Inexplicable terror seized the alien. From the moment of entry into the man's brain it had known something was horribly wrong. The brain was not a living tissue of infinite scope, but an artifact with fixed neural paths, limited, unadaptable. It compressed the alien's field of consciousness, cramping it into inactivity. Only the knowledge that the girl's life processes had ceased kept the alien sentience within the brain of its new host. There could be no return to the girl. Simultaneously with possession, mobility in the man ceased. No limb or part of him responded. Dismayed, the alien had waited. How, a click came at the chest, and life began to fade from the artificial brain. The alien knew it must flee, or die, locked within the congealed synapses of the brain that was no real brain at all.

Captain Penvenny snarled, lips drawn, as the oscillating bumblebee swept from Albert Mademann. He had waited as for a hornet about to issue from a hole. Albert's physical mobility had ceased automatically when his mental conflict topped a set level. Now, his cybernetic brain was switched off, cooling, and no longer a hiding-place, a refuge.

The bumblebee seemed to have many spidery legs, vibrant, treading air. It hummed with a burbling that made Penvenny's skin creep. He struck, missed, and struck again. His hand closed upon something hot as molten steel. He squeezed, felt resistance, then nothing . . . A slowing pulsation of green fire was in his palm, fading, dying. When it was gone a tiny, flattened remnant as of a moth's crumpled wings, powdery as age-old dust, alone remained. His exhaled breath dissipated it upon the air.

Trembling, he jerked up the switch on Albert's chest, and pressed a button that initiated his physical activities. The phone flex was easily mended. The officer the other end had been waiting.

"A success," Penvenny said, and licked his lips. "Get Mademann Robots to produce some more copies of Albert. This is the only way I know to trap the newcomers in an inactivated system. I'll give a fully detailed report when I return. Now Albert is waking and must not hear me, or he'll have to be brainwashed."

Albert smiled when he got up. "I was going to call you, Captain Penvenny."

Penvenny wiped his brow and face, and smiled. "That's all right, Albert. Carry Birdie Cairns out into my car, then you can go back fishing."

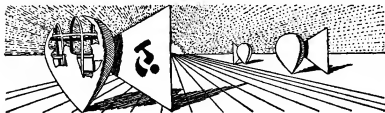
Albert did not wonder why the girl was so still, as he waited for Penvenny to open the car door. When Penvenny knew about things, those things ceased to interest Albert. If in doubt, tell Penvenny. When Penvenny knows, everything is all right . . .

"You'll probably be able to stay fishing a lot longer than we thought" Penvenny said as he started the engine.

Later, Albert stood by the lake reeling in his line. Bright sun shone on the trees, making them glow golden green, but such things did not arouse much feeling in him. Instead, his attention was directed upon a robin that occupied a twig on a neighbouring bush and regarded him fixedly. A possessive instinct seized him. It would make a nice pet, he decided. The impulse rose unbidden, automatically. He took the robin in one hand, and was astonished that it did not try to fly.

Trailing his rod, he started back for the cabin. *Better let Captain Penvenny know*, he thought . . .

Francis G. Rayer.



As explained in our last issue "Kenneth Johns" is the joint name of science writer John Newman and author Kenneth Bulmer now writing together in collaboration. We are likely to see many articles from them and the following one on the I.G.Y. is most topical and timely.

THE INTERNATIONAL GEOPHYSICAL YEAR

By Kenneth Johns

Scientists of forty-one countries are co-operating to carry out the most intensive and detailed examination of a planet ever undertaken. They plan to study this planet during an entire revolution and a half around its parent sun and will, in that time, gather sufficient data to keep them occupied in correlation and analysis for years to come.

The planet? *Earth.*

Strange though it may appear, it is true to say that today scientists know more about the structure of the atom than they do of the structure of our own planet. This is due mainly to the phenomenal increase in nuclear physics of recent years. And the more information about Earth that is gathered leads inevitably to the conclusion that there is a great deal more to be learned than was at one time imagined.

The first International Geophysical Year will last from the 1st July, 1957 until December, 1958. During that time scientists will regard Earth as an alien planet. They will take the attitude that they have just stepped from a spaceship onto the surface of the Earth—and they want to know all about this planet.

Although they will be gathering many varied individual facts about the Earth, they want to weld all these diverse bits of information into one cohesive whole.

Looking at the Earth through a stranger's eyes is an awe-inspiring business. We know so much, yet there are dozens of conflicting theories about its origin and history in terms of geophysics. They clearly indicate that we are only at the beginning of understanding. The prime purpose of the International Geophysical Year is to gather data according to plan under a co-ordinated control, and then to evaluate that data in terms of global effects and world-wide phenomena. Scientists have been running ahead of themselves. The frontiers of science have been pushed outwards in every field at a mounting rate since the end of the war. New surgical techniques, revolutionary drugs, a growing understanding of nuclear power and the promise of fusion-power to come and the glittering prize of space flight; all these material advances are the result of the impact of fresh ideas.

Ideas are the life blood of science, regenerated by the painstaking research that follows, buttressed by the calculated logic of scientific method. But, if these fresh ideas are to bring new advances, there must be a parallel accumulation of fresh facts. And, before these facts are accepted, they must be checked and double checked.

The scientists of the countries taking part in research during the I.G.Y. will take all of Earth as their province. They will also be studying the Earth's movements in space as affected by the gravitational attraction of other celestial bodies. They will explore the planet's spatial environment, the particles and radiation that bombard it from the Sun and other stars. They will record these effects, and also those of meteorites, on the atmosphere. Meteorology will come under intensive security. A whole picture of our atmosphere will be built up.

Researches will probe the mysteries of the seas, will try to uncover more facts about the crust of the Earth, and, deeper, the inner-core—which may be at a higher temperature than the surface of the Sun.

That is why this eighteen month period is to be known as the International *Geophysical* Year. It will deal with Earth's physical phenomena. Today, scientists do not know why the Earth's crust is thinner under the land masses than it is under the oceans. After the I.G.Y., we may know the reason, and hundreds of other similar mysteries may be cleared up.

Rockets have been used for a number of years to supplement sounding balloons in the exploration and recording of data of the upper atmosphere. A plastic balloon which carries a light and cheap rocket aloft to reach heights of 60 miles has been developed and will be

extensively used during the International Geophysical Year. The combination is known as the 'Rockoon.' The balloon lifts the rocket to a height of 12 miles, and the rocket, using solid fuels, then continues to 60 miles. Owing to drift and rotation of the balloon introducing variables, this is not as accurate as the Aerobee and Wac Corporal rockets. But the 'Rockoon' is eminently suitable for shipboard launching and will be used in the Arctic and Antarctic.

Until the advent of the rocket, direct research of the upper atmosphere was restricted to heights of 20 miles. However, a considerable amount of information had been obtained by indirect means and from theoretical deductions. For instance, the sodium layer at 45 miles altitude was discovered by spectroscopic observation. Recently, a new and astonishing discovery has been the existence of atmospheric Gulf Streams—great fast-flowing rivers of air high above the Earth.

To study these and allied subjects, three chains of meteorological stations will be erected. From the North Pole one will extend southwards through Europe and Africa, the second through the eastern portion of North America and west coast of South America and the last through Siberia, Japan and Australia. They will be linked by a ring of stations near the Equator. A prime function will be to follow the circulation of the atmosphere.

Meteorologists want to know much more about the atmosphere and the effect of the Sun's rays upon it. They will measure the content of carbon dioxide to determine just how efficient it is in trapping infrared radiation near the surface. Ultraviolet radiation, together with particles from space, winds and the gravity of the Sun and Moon affect the ionosphere, 45 to 200 miles above the Earth. They cause it to move up and down and to vary from hour to hour. The four electrically charged layers are mapped by an ionosonde, a radio receiver and transmitter operating automatically over a wide band of frequencies, bouncing radio waves off the layers. The light-reflecting capacity, the albedo, of clouds will be inspected to discover just how the reduction of sunlight by reflection affects the weather.

The Sun is continually giving off gigantic spouts of gas, much of which falls back to the solar surface. Enough reaches the Earth's atmosphere and is guided by the planet's magnetism to the poles, where it causes brilliant displays of light—the aurorae. Scientists will be studying the aurorae with radar, spectroscopes, sky cameras and radio telescopes. They will measure the apparent twinkling of radio stars when observed through an auroral exhibition. By using radio waves, a group of Italian scientists hopes to create an artificial aurora five miles up over the Italian peninsular.

Night and day there is a continual fluorescence of the upper atmosphere invisible to the naked eye. Much of this airglow is in the infra-red and is only detectable by spectroscopes. But at twilight it is strong enough to be measured as a flash a hundred times as bright as the glow at night. The airglow arises from excitation of atoms and molecules of the air by solar radiation so that they store light, releasing it on collision with other particles. During the I.G.Y. scientists will be sending many rockets to check on the airglow, high enough so that their instruments will be able to find it when the sky appears black.

It is significant of the current trend of thought that, of the measures being taken to explore our atmosphere the one that has caught the public imagination is the very step that will eventually enable us to leave this planet. The basic task of the miniature moons—small artificial satellites—will be to measure radiation received from space and from the Earth. This increase in knowledge of our environment will give us fuller information on the shape of the Earth, cloud formations, density of the upper air and solar and ionospheric storms. To follow the movements of air currents the satellites may identify them with sodium vapour to increase the airglow.

They will circle the Earth in approximately ninety minutes, two hundred miles up, and will weigh around 150 pounds. Launched by America, France and Russia, they will eventually fall back to Earth. The tenuous fingers of air reach far enough to drag them back—but, as they orbit on their falling paths, their course and speed will be exactly plotted and thus, in their withdrawal from space, will teach us much about the atmosphere we would not otherwise have known.

In contrast with this ambitious programme, the plans of Great Britain to fire a few solid-fuel rockets from Woomera appear slight; Great Britain's main interest during the I.G.Y. will lie in the icy, lonely, gale-lashed continent her explorers know so well. And yet, we know so little about the Antarctic that it might well be an alien planet on which we have planted a flag and then returned to Earth. With the decision of the nation to explore their world, it is fitting that Great Britain should devote her main effort to the Antarctic. That continent, cold and silent except for the sharp crack of splitting ice contains about 5 million square miles of land of which only 2 million have so far been mapped.

Here, the I.G.Y., although the largest joint undertaking of scientists, follows tradition. 1882-83 saw the first International Polar Year and fifty years later, 1932-33, came the second Polar Year. Now, only twenty-five years later, we want to know more about the largest sheet

of ice on Earth, containing 86% of all glaciers, many active volcanoes and mountains three miles high. The Earth is flatter at the South Pole than anywhere else and it is the centre of the magnetic field of Earth. Over a million years ago the South Pole was magnetic north. Geophysicists ask: "Why?" At the South Pole, cosmic ray bombardment attains a maximum. And there is a unique west to east current circling monotonously around the Antarctic continent.

To unravel these mysteries, the British party, led by Dr. Vivian Fuchs, will trek right across the continent. They will stop over at the South Pole, where they will be welcomed by the Americans who are setting up one of their bases on the spot first reached by Amundsen. Admiral Byrd will bring his experience to the venture. The South Polar station will be entirely supplied from the air. The Americans will man five other bases out of the thirty-one proposed. The Antarctic phase of the I.G.Y. is of prime importance. Work will include measurements of gravity and magnetism, inspection of the thickness and layers of ice and analysis of the ice on the surface and from corcs drilled from deep below the surface. Echo sounding with explosives to give miniature earthquakes, similar to the system used for oil prospecting, will give the depth of ice over the land masses. Much atmospheric work will also take place and rockets will be ascending over the ice, many with instruments to discover whether high air streams travel directly from one pole to the other.

The oceans will be subjected to new analyses and the main ocean currents and the contour of the sea beds will be mapped. The incidence of plankton will be established. The geomagnetic electrokinetograph, a new instrument, will find the movement of water strata by measuring electric charges resulting from their passage through the magnetic field of the Earth.

And the interior of the Earth itself will be studied. At the present time geophysicists think there are seven shells of material composing the Earth. The interior will be examined by accurate measurement of natural earthquake shocks. Estimates so far made of the core temperature range between 2,000 to 6,500 degrees Centigrade and the core itself is thought to be solid nickel-iron alloy with a radius of 880 miles. A solid core, because of the immense pressure of four million atmospheres and in spite of the high temperature. Round this a shell of fluid, pressure-modified rock brings the central core radius to 2160 miles. The core rotates more slowly than the surface, which is slipping, thus causing the apparent movement of the magnetic poles. Sometimes a difference of three thousandths of a second in the length of the day is caused through electromagnetic currents arising from the interaction of core and surface.

As though it were a balloon distended in some places more than others, creating differences in thickness of the rubber, the Earth's crust varies from a thickness of 30 miles under the oceans to a mere 7 miles under the continents. This crust rests on the mantle, generally solid rock to a depth of 1800 miles, where it merges with the fluid rocks beneath.

Under the leadership of the Comité Special de l'Anne Geophysique Internationale the forty-one nations are already at work preparing for the great effort.

Although in the past much data has been accumulated, the stumbling block has been the large number of interlinking variables and the dubiety of the data themselves. All accurate geophysical measurements are complicated on Earth because a single variation of one factor can alter all the others. Unless simultaneous observations are made of as many phenomena as possible, any information collected is only partially acceptable. This process must continue for a considerable time and be carried out with punctuality and precision under all conditions.

This strenuous and exacting procedure is what the I.G.Y. has been set up to achieve. Scientists will be aided by the new and accurate instruments, many self-recording, that have been developed during the past ten years. It is now possible, through the benefits of electronics, miniaturisation and new measuring methods, to achieve laboratory precision in the wide out-doors. For this eighteen months, the whole Earth is going to hum with activity. And, afterwards, the nations will continue to collaborate in the massive task of understanding the meaning of all the measurements they have collected.

And, when we know a great deal more about our own planet, we will have perfected, through actual use, a working blueprint to use when the time comes for us to carry out a planet-wide survey of our first alien world.

Kenneth Johns.

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The current theory concerning the possible composition of Venus is that it is a dry arid world swept by violent storms. The older theory has it that the planet is almost all water—and makes a fine locale for an underwater adventure as a change

By Kenneth Bulmer

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The space-chewed little character had had six Nuclear Fizzes—the empty glasses were lined up along the bar in front of him—when I slid onto the next seat. As I ordered I gave him the old gimlet-eye. He looked to be about what Space Navy Intelligence had told me to expect.

"Have one on me," I said politely, and then, as though stricken by a Divine revelation: "You're Jimpy Norriss, right?"

"Thass right, friend," he said with only the slightest trip over S's and R's. "Jimpy Norriss, the best damn salvage man on Venus! And who might you be, friend?"

I went into my spiel smoothly. Admiral Rattan on Moon Base hadn't left much out of the hypno-tape and I sold Jimpy the line that I was a fortune hunter easily enough. I told him my name was Lucius Black—well, it said that on my passport—and that I was interested in a ship that had crashed ten-twelve years back.

"On the Hartshorn Reef?" he said quickly.

"No," I answered casually. "I think she slid under about couple hundred miles south of there, just north of Freetown."

"Ninety miles or so from here," Jimpy said. "Well, I wish I could help you, mister; but I've got myself tangled up with a bit of personal salvage. Yeah, I've gotta little private diving to do. Sorry."

This was a setback; but not an unexpected one. I talked money. Intelligence had a comprehensive file on Jimpy Norriss and I knew that he was not above making a fast turnover if he didn't have to step outside the law. He'd done that once and the results had been salutary. He was a tough, spidery guy with a face like a wire pot-scourer and I knew that his boast about being the best salvage man on Venus was strictly on the level.

So—I talked money, big money. Jimpy didn't hesitate.

"Like I said," he repeated softly. "I'm after bigger stakes than you can stand, mister. I'm sorry, but that's the way it is." He gestured widely. "With all those old ships lying underneath, and a fresh wreck every now and then, there's plenty of salvage for us guys."

"Yeah," I said, still smoothly but feeling miffed at his stubbornness.

"Yeah—but how often do you find a wreck that pays off?"

"Not often," Jimpy admitted. "But out of the spaceships that've smacked down a little too heavily onto Venus over the past few hundred years I'm bound to turn up a good'un now and then. The ocean bed's littered with 'em along the Reef and out in the Bay."

"Many other salvage outfits operating around here?"

"Few. We do all right between us. Salvaged metal alone pays big dividends and most of 'em are like me, go after the rare metals. Anything the ship carried is a sorta bonus, if you follow." He bit off a cigar and lit it.

I followed all right. Traditional salvage point of view, and one which could make a man rich in a few years.

"Any idea who I can ask to do this job for me?"

Jimpy shrugged and blew an evil cloud of smoke.

"Try J. C. Witherton. He's got a boat could make the trip standing idle." He chuckled, dragging on his cigar. "I happen to know."

"Thanks," I said. I stood up, sensing a mystery between Jimpy and this Witherton. That wasn't my business, my job was to arrange for the salvage of TSS *Cornwallis* and ensure that the operation went off quietly without any public attention. With all the deadly characters living along the Reef, most of them only too happy to burn their own mother for a chance at illegal profit, I daren't risk drawing hard watchful eyes in my direction.

Naval Intelligence had received favourable reports on Jimpy Norriss. Now that he was unavailable I would have to try elsewhere. And elsewhere could very well end up with me with six inches of steel in my back, or down under with empty air cylinders. Still, that was what I was paid for.

"Witherton will probably be along at the Aces High," Jimpy said. "Give him my love."

"I'll do that," I said and walked out. The Aces High was just another frame saloon with a bubble roof. I ordered at the bar, asked for Witherton and was directed to a saturnine, tall, dyspeptic-faced man playing poker at a round table against one wall. The other players looked like his hired divers.

"Mister Witherton? I'm Lucius Black. Mr. Norriss recommended you to me."

"Well?"

"Ship down off Ferranti Point, just north of Freetown, ten-twelve years ago. I'm interested in salvaging her."

"Sit down, Mr. Black. Ferranti Point, eh? Haven't been along that way, oh, coupla years. You own the ship?"

The question came out like the delayed crack of a whip. This tough old bird would bear watching.

"No," I shook my head. "She was the *Cornish Maid*, liner, Earth to Venus. My father was aboard—" here I allowed a histrionic, but not overdone, break to enter my voice. "All his personal papers, papers which are very important to me, went down."

"I see. You're sure she's where you say she is?"

"Pretty positive. I had a report from the company." I didn't think it necessary to tell Witherton that Naval Intelligence had spent a considerable sum finding out just where *Cornwallis* had sunk. And even if Witherton checked, he'd find out that a ship called the *Cornish Maid* had been lost about twelve years ago. That had been convenient, the two ships crashing so close to each other; and the agent who had bummed along the coast to find the ship we wanted hadn't been bothered by any of the Coast Brethren. I hoped I'd be as fortunate.

"All right, Mr. Black. It'll cost you two thousand—not a penny less."

We settled for seventeen hundred and I left the Aces High with a promise to be ready for the morning.

My next stop was the Diamond Horseshoe. Here they had a strip of plastic carpet along the bar and a scrap of stage flanked by synthisilk curtains. They even had an aged M.C. in a faded purple tuxedo. I found a dry foot of bar and propped my elbows. I waited.

Pretty soon one of the girls wandered over, smiled and I ordered her a glass of coloured water. The barman called it a Martian Screw-driver. I didn't worry. It was taxpayers' money, anyway.

She was wearing a thing that started at one shoulder made a half-hearted attempt to curve around to the other side and gave up about where her navel would have been. She had a rock in there the size of a wristwatch. Light splintered from it into my eyes.

"The get-up comes with the job," she said lightly. "Like it?"

"I've seen worse," I said.

"Like the one you're wearing." Her voice was low and throaty.

"That transceiver went out of Navy use a good two years ago."

"It's got my children's signatures on the back," I said. "I like it."

"Just so long as you can keep in touch with me. Jimpy didn't give you the okay, did he?"

"You've been eavesdropping."

"Nope. He came over all coy last week. Even stayed off the booze."

"He was hitting Nuclear Fizzes when I saw him."

She laughed softly and nodded her head. We moved away from the bar into a secluded booth. "He lives on those. They're food."

"I see. What's caused him to refuse a job?"

She shrugged. "I guess he's found a wreck and thinks he's on to a good thing. Who's doing the job?"

"Fella called Witherton. Know him?"

Her expression told me. "Witherton? Hey, hey, fella. You're tangling with trouble there. He's the biggest crook on the Reef."

"Jimpy recommended me—"

"Sure. Him and Witherton had a stand up fight fortnight back. Jimpy's way of pacifying the lightning while he's busy working on that ship he must have found."

"Well, I'm carrying on as usual. Admiral Rattan was very pleased with your work. Your report on the salvage outfits here was most comprehensive."

"Thanks!" She lit a cigarette, lipstick smearing the yellow paper.

"What happened to Kirby?" I asked.

"After he established where *Cornwallis* was he went back to Earth." Her eyes clouded. "Didn't he make it?"

"Not as far as I know. You think these thugs of the coast got him?"

"He came back okay from the Reef. Last I saw him he was stepping into a plane for Venus City. Pity. Nice guy. Danced a terrific tango."

I harrumphed. Then, brushing away cloying smoke from her cigarette, I said: "I'm starting for Ferranti Point in the morning. I'll contact you later. Be a good girl while I'm away—oh—and, what's your name?"

"Admiral Rattan didn't tell you?" She was astonished.

I smiled easily, putting the old heave-ho into it. "Security," I said succinctly.

"Janice Armour—they call me the Savannah Siren around here. It's part of the build up."

I stood up, smiling down at her. "It suits, baby," I said. "See you." And I walked out.

Which wasn't the cleverest move I could have made.

It was pleasant to be on a case where I could walk outside the bar and not be shot at, knifed or slugged. I still had that happy, warm feeling next morning as we sailed out of the Bay aboard Witherton's salvage ship *Pocos* and bucked a medium breeze towards the Reef and Ferranti Point.

Admiral Rattan had explained fully to me why it was necessary to salvage *Cornwallis*. I felt under no obligation to tell Witherton. My father's papers were of sufficient importance, according to my story to account for any odd actions I might make. I took in the morning breeze, sweeping off the sea and carrying the smell of marine life in a refined way that would have astonished the salty ancients of Yarmouth. This high Venusian ocean, held in a thousand mile wide cup of mountains and well within the breathable air layers, exhilarated me. Above the little salvage boat, pitching across the rippling waves, arched the swirling light-diffusing layers of gas that enshrouded Venus in a silver cloak.

If I hadn't been playing the game I was I'd have sat back in a pair of shorts and basked sybaritically. As it was I kept a weather eye on Witherton and his bully boys.

By the time we reached The Reef and stood in again for Ferranti Point I'd organised the way I'd handle them if any trouble arose. I hoped fervently no trouble would crop up—it would throw a monkey wrench into my plans. Timing was essential to success. I had those tough guys diving the first day we arrived, giving them no time to think up excuses.

It was an education the way they handled their suits. The Space Navy had given me plenty of training in spacesuits and I felt confident I could take care of myself from Mercury out to Jupiter's moons—and beyond when we got around to jetting out to Saturn. But these characters astonished me.

Their suits were simple rubberised plastic with metal stiffeners to prevent starfishing from overpressure. They had globular helmets of glassite and oxygen cylinders coupled into re-breathing equipment. I preferred Navy suits: but corrected myself as I realised these people thought me a civilian. Watch it, eagle eye! Admiral Rattan had been persuasive when he'd picked me for this mission—I hadn't objected; but I needed practice.

Witherton had his boys over the side and gliding down into green depths in a matter of minutes. They took television equipment down with them. Kirby had plotted the ship smack on the nose; the first try brought a hail from the man at the phones.

"Contact! Hey—they've found 'er!"

"A good start," Witherton grunted.

I really started to sweat now. I looked into the television screen and saw the long needle hull, its ends lost in dimness, overgrown with weeds and barnacles and alien Venusian undersea life. She'd been down there ten years. The picture wasn't good; but I could see an airlock and almost immediately a diver swam slowly towards it and worked for a few moments. Then he turned to the camera, gave the thumbs down.

"We'll have to blast the lock," Witherton said.

"Just so you get inside," I said and looked up from the screen to stare into the cold muzzle of a gun.

"Let's lay this on the line, Mr. Black," Witherton said crisply. "You say you want your father's papers. Okay. You can have 'em. But the rest of the ship is mine. Understand?"

This, I'd expected. Not in such a crude form, perhaps; but it didn't bother me. Still, I'd better show some signs of alarm. I alarmed. Then I said: "Sure, sure, Witherton. I just want the papers. You can have the rest."

Witherton laughed contemptuously. He thrust the gun back under his coat. "Just don't forget, mister."

"The cases I want are marked N.P.B." I said. "My father's initials, Neil Patrick Black."

The following three periods of diving had the lock opened and a mess of metal, encrusted with marine growths, brought to the surface. No boxes marked N.P.B. were hoisted aboard. I squinted up at the weather and didn't like what I saw. Standing at the boat's rail I waited as the water bulged, split and ran, and another haul of metal swung up and inboard.

I stomped across the deck to the T.V. screen. It showed a grey nothingness. I fought to keep down temper and found Witherton sitting under a canopy drinking whisky.

"Now listen here, Witherton," I began. "I'm not paying you to bring up metal to make you rich. I want those boxes, and I want them fast!"

"My divers can't get to them yet," he said.

"You know where they are, then?"

"No, that is, not exactly—"

"Quit stalling, Witherton! I want those cases up next load, or the deal is off."

He laughed and finished his whisky. His brown face held nothing but amused contempt. He said: "So I don't bring up your cases next load, and you call the deal off. What would you do, smart guy?"

I had another look at the weather. Clouds were dipping from the main mass, being blown rapidly across the lowering sky. Pretty soon diving would be impossible as the wind lashed the water and stirred up the Reef silt and debris.

Realisation came, with a shock, that I was in a nasty situation. Quite obviously Witherton had only agreed to take the job in order to be led to where a ship lay—he'd been given a fortune on a platter. And he knew where she was, he could always return. As for me—a knock on the head and a splash and—"Mister Black? Never heard of him."

And, with all his bully boys around, waving a gun wouldn't help any.

I said calmly: "Look, Witherton, there's a storm brewing. Let me go down and grab some of those boxes, that way you won't lose any of your own diver's time."

He considered this, picking his teeth and glancing at the sky. Presently he nodded his head, grinning, and I was rapidly sewn into a diving suit. As the helmet went over my head and was clamped into position a thought struck me that perhaps I'd jumped into the fire—and pulled the lid on top.

Going down into the green depths was a new and chilling experience. Small fish swarmed away from my helmet light. When my boots clamped onto the ship's hull I realised just how alien this undersea world was, even more alien and inexplicable than the mysteries of Earth's own oceans. Air bubbled in my helmet and the oxygen cylinders' gauge told me I had two full tanks. I controlled my breathing and let myself down to the sea-bed alongside the wrecked hull.

To one side the anchor cable of *Pocos* went up in a curve and as I looked a basket filled with metal parts rose until it vanished into opaque distance. A voice, seemingly at my shoulder, bounced around in my helmet.

"Black? Airlock's just ahead. You'll have to find your own way inside the ship."

I saw a dim figure before me, waving an arm, and I said: "Okay," and walked clumsily along to the airlock. Inside the ship the confusion was pathetic. Metal walls and bulkheads had been shorn off by underwater cutters: that had been done by Witherton's men. But the other damage, the buckling of fore-and-aft members, the crumpled overheads, the general smashed-up appearance of the ship, that told eloquently of the killing impact as the ship had burst onto Venus out of control and plunged hissing beneath the sea.

I walked slowly forward. I began to breathe faster. A horrible presentiment rode me. And then I saw an abandoned rocket-life-jacket where someone had discarded it moments before the crash ten years ago.

Ten years? *Twelve*.

On the rocket-life-jacket, boldly stencilled: S.S. *Cornish Maid*.

I swirled around, thrashing water, and plunged for the airlock. Outside the first thing I noticed was the darkness; the sea had lost that dim green quality and looked now like stirred up mud. The storm! I looked for the anchor cable and couldn't see it. I could have sworn it was just there, where a giant coral swelled like a petrified atomic bomb explosion.

"Witherton!" I yelled into my microphone. "*Pocos*!" No answer. I didn't really expect one. The suit radios had an extremely limited underwater range; but I knew that *Pocos* and Witherton were far beyond that, sailing away before the storm and leaving me stranded on the bottom.

And all the time we'd been salvaging the wrong ship!

I didn't bother to curse. At first I couldn't see what the hell I could do. It looked as though I'd bought the last round of drinks—that this was flameout.

Witherton probably was running south from the storm making for Freetown. Freetown! A huddle of shacks perched on the Reef giving a precarious and semi-lawless livelihood to a couple of thousand people. Jimmy Norriss had mentioned it when we'd talked. I ought to be able to walk undersea across to the Reef, then strike south to Freetown. A long way, but my only way out.

I started walking, wondering if the two-tank supply of oxygen would hold out, or whether I'd collapse first from exhaustion. It was rugged

going. I stumbled and slipped over the bottom, avoiding sticky patches and watching the swelling bommies sprouting on either hand, their coral sides sharp and menacing and waiting. Current caught me, knocking me off my feet, swinging me dangerously in towards the bommies. If those coral razors touched my suit—

The water was warm enough; but a chill was creeping into it with the encroaching storm. Many times I was lifted off my feet and pendulumed helplessly before I regained an even keel. Visibility was down to a couple of yards. I was gasping with effort and my legs ached as though the sinews had been used for a Stradivarius.

One lunge of water picked me up, dunked me down, and catapulted me clean out into air. As I arched over and hit the water with a fountain splash I had a single glimpse of the weather. It was not pretty. Black clouds, torn from the atmospheric mountains above, were racing down like demented nightmares and lightning sizzled blindingly even in the fragmentary time I was airborne.

The second time this happened I hit the bottom with force that jarred my eye teeth.

This couldn't go on. The water had shallowed enough so that, in Venus' weaker gravity, the wind could lift it and toss it about recklessly—and with the water, me.

I decided to ascend and stay there, away from the impact of coral and the danger of ripping my suit. I inflated enough to float half-submerged and lay for a space, retaining my wind. As soon as I felt ready for the next phase, I became aware of a queasy sensation in my stomach. Hell's bells! I—who'd blasted from all the explored planets and satellites and could do calisthenics in free-fall—I was being sea-sick.

And in my helmet that would be catastrophic.

Changing the subject of thought helped a little, then, just as my tired mind was buzzing again over the mistake in ships and a query as to where *Cornwallis* was, I saw a black, wind driven shape foaming down before wind and sea.

I yelled into my microphone, spraying the bands with a frantic call. I had an answer on a frequency often in use for inter-suit communication.

"Help!" I yelled, nearly deafening myself in the helmet. "Help! In the sea, off your starboard bow!"

How the sailors aboard hauled me in was a mystery compounded of superb seamanship and calculated gallantry. I lay on a heaving deck and heaved in unison. Some time later, with a hot toddy restoring my confidence, I stared into the shrewd, lined face of Jimpy Norriss.

"Nice night for a swim," he said cheerfully.

"Thanks for picking me up," I said. "I was lucky."

"Could be. We'd spotted you on radar and I thought you might be an unpleasant type of fish we sometimes run into along the Reef. You had us worried until you called."

I didn't bother about that. Jimpy's boat ran with her tail between her legs, the storm bludgeoning her along the Reef and past Freetown, piling up waves that foamed down and around us and, I felt convinced, ready to poop her every time. I found a rail and clung and forgot everything about being a Navy Secret Service man. I just concentrated on keeping my stomach somewhere near where it belonged. It was a long night.

The wind slackened with the light and by the time I had my faculties in working order again Witherton's *Pocos* was running within hailing distance. Seas tumbled in a white smother under her counter. The sight of her, skating across the waves with spray whipping back, filled me with rage. I leaned into the wind and shouted. My voice was tossed broken in the smash of wave and hiss of water.

"Leave him alone, Black," a voice said behind me.

I turned slowly. A man was leaning against the engine room coaming, a half-smile on his brown face, the dark strip of moustache emphasizing the lumpiness of his jaw.

"What was that?" I said.

He was wearing a civilian suit, a snappy two-tone job that harmonised with his shoes. I didn't like his smile and almost as a reaction eased away from the rail and relaxed my muscles.

"I'm Kirby," he said, and laughed.

"I heard you'd been carved by the coast people." I felt a wash of relief—and a wary tenseness filled me. "Admiral Rattan will be pleased."

"Yeah."

"Witherton," I said slowly, "over in that boat—left me under the sea to drown—"

"Save it, Black." Kirby's hard eyes were unfriendly.

Before I could answer that a girl stepped out from the tiny cabin, her hair held in a synthisilk scarf. The transceiver that had flashed from her navel was now demurely strapped around her wrist.

"Settle him quick, Tony," she said, her voice a hose of hatred against the wind.

I didn't wait for Kirby to act. I dived low, took his legs out from under him, carried on and brought the girl down in the tangle. A fist landed on my chin. I kicked Kirby where it hurt and then the girl's foot paralysed my left wrist. Kirby was grunting like a speared

Veni-snapper. I hit Kirby again. That left the girl. I pinioned her arms and twisted them behind her back.

"All right, Savannah Siren," I panted. "What gives?"

Janice Armour stopped struggling and began to curse. The boat bounced over the waves. Apart from the girl's glossary of spaceport phrases it was very quiet. Unnaturally so. I began to add one or two things together. The picture made my tired lips widen, made my smarting eyes sparkle. I laughed. Kirby—and the girl, too!

At that moment, with me holding the girl's body close, the boat swung sharply and threw us off balance. She was like a cat. She sprang away, back heeling me painfully and scabbled across the deck towards Kirby's jacket pocket. It was obvious. I jumped. Her head hit the deck and she went out of circulation.

I even felt a heel for hitting a woman. But—she was no lady. And I never strike ladies.

Leaving the two unconscious bodies I walked aft, found the wheel and brought the boat round again so that she was riding the waves instead of trying to tunnel them. In the cabin Jimpy was bound with adhesive tape. His eyes rolled expressively. I debated whether to release him or not; humanity decided me, his face was going blue. Together we released the rest of his crew and then collected Kirby and Janice Armour.

Jimpy, of course, had a magnificent air of injured innocence. We sat round drinking coffee.

"They knew you'd come aboard, Mr. Black," the little salvage captain said. "They jumped me—he with his gun, and she wound the tape around us."

"That trifle of personal, private salvage you told me about, Jimpy," I said, and waited.

He had the grace to cough and lower his eyes. "They'd told me they didn't want anyone to know—a logical precaution. They were going to pay me so well I strung along with them. And the ship would always be there, once I'd been shown."

"Yes. Like Witherton. I suppose the name of your ship was *Cornwallis*. Right?"

"That's right." He jerked his thumb towards the two bound prisoners. "I didn't know it was a Navy ship until we reached her—they told me they were Naval Intelligence."

"So they are—or were. It seems that Mr. Kirby's greed overcame his scruples. He had the job of locating *Cornwallis* and reporting back. He reported her location and we sent a girl to check on local conditions—for obvious reasons. She must have persuaded him that to get-

rich-quick you left the Navy and absconded with—with whatever the Navy wanted," I finished, cursing my tongue.

"What—is that?" Jimpy said quietly.

"What did they tell you?"

"They wanted two boxes marked N.P.B.—containing important papers of the firm they worked for, Nolan, Peters and Bryning. Insurance racket, so they said." Jimpy produced a cigar and looked at it. "Didn't look like insurance company boxes to me," he said.

I had to get a grip on myself quickly. The boxes were aboard! I stood up and crossed to the lee rail, leaving the question still hanging in the cabin. *Pocos* had opened the gap between the ships and I could see the black dots of men working about the deck. Ahead the sky was its usual covering silver, with the granulated strata of the higher poisonous levels streaming away under the influence of what was left of the night's gale. There was a tang in the air and spray flew in drops across the weather rail.

I had to get those boxes into my own possession without antagonising Jimpy and without allowing Kirby and the Savannah Siren to make a comeback. Tricky business. I still had my gun, a 6 mm high velocity pistol; it might become necessary to use it. I hoped otherwise. For my own sake.

The old apple as bait, proffered by a seductive woman, had ankle-tripped another good Joe. Kirby had been a wild character by report, reason for his choice to prowl the Reef, and that avaricious streak he must have had had been blown wide open by the lure of cash urged by the sultry Savannah Siren. But I had to chuckle, all the same.

Witherton's *Pocos* was edging nearer. I had a score to settle with that character; but it would have to wait. Jimpy would be working things out and I put little faith in his integrity if he decided to jimmy open one of the cases. Just so we sailed safely back to port in time for me to leg it across to my ship—with the boxes.

Jimpy spoke from over my shoulder, making me start. I hadn't heard his sneakers on the deck.

"I bucked the law, one time, Mr. Black. It didn't pan out too well. I guess you're Navy Intelligence too, and your partners have ratted on you. What's in those boxes must be mighty important to Space Navy to take all this trouble to retrieve them—and to play it clever and use local labour instead of shipping in a full scale Navy salvage team."

I decided, in that moment, what I must do.

"Yeah," I said, turning and giving him the benefit of a tired but loyal smile. "We played it clever. We knew you were the only

reliable man on the coast. H.Q. thought we could make a clean easy lift and be off before the sharks, like Witherton, got to noseying around. Seems Kirby sorta fouled that idea up."

"I don't want to know what's in those crates," Jimpy said suddenly, and I saw the twitch in his eyelids. He had to say it aloud, to reinforce his decision. Old habits die hard. He was a good trouper, was Jimpy Norriss, and I warmed to him.

"Right," I said, putting the iron of decision into my voice. "I'll let Witherton get away with his trick for now. Get me back to my ship, with the boxes, and I'll see the Navy recompense you. Deal?"

Jimpy stuck out his hand. "Deal."

Later that day we nosed into the Bay and tied up at the weed encrusted jetty. Jimpy carried one box up on his shoulder and I carried the other. I hailed a monocab and turned to Jimpy, standing there with his broken-peaked cap pushed back.

"I'll be back for Kirby and the Siren," I said. I tried to keep some of the old Navy snap in my voice and bearing: but it was tough. My eyelids felt as though a harpy were putting pennies on them already. I swung into the monocab.

"Say, Mr. Black," Jimpy edged closer, speaking softly with a quick glance at the driver. "Tell me, between friends in confidence, just what is in them boxes?"

Bravado made me glib. I told him the truth.

"When *Cornwallis* crashed she was carrying the bank roll for the whole of this sector of Venus Space Navy. Small denomination notes, the micro-notes we use spaceside, made from titanium. Ten million credits, Jimpy," I said, and sweat broke out on my forehead. "Ten million. Goodbye."

I shouted at the driver and the monocab lurched forward. Jimpy was standing there stockstill. Then he took off his cap, threw it on the jetty and jumped on it.

I chuckled. I laughed. I was still semi-giggling when I paid off the driver and climbed aboard my personal rocket. I checked the controls. Fine. I checked supplies. Fine. I checked the boxes. I ran my hands over them, chuckling. Superfine.

Go back for Kirby and the Siren? Not on your life! Kirby had played it badly, had acted like an avaricious fool, blinded by the girl. I had a defter touch.

Admiral Rattan and his talk of the Navy way, of the Terran Space Navy and what it stood for and his grandiloquent praise for my undercover work! It had led to this, though, and I felt quite fondly towards the old boy.

Ten million titanium smackeroos. All mine!

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Stories concerning alien creatures are always popular but they need writing in such a manner as to exclude the "bug-eyed monster" complex. Dan Morgan does this admirably in the light-hearted effort below.

By Dan Morgan

First Lieutenant George Bream, commander of Interstellar Exploration Force Ship *Groper*, placed his helmet and protective suit in the decontamination chamber and slammed the door. His stubby right hand moved up to his black beard and he moved towards the ward-room, enjoying the quiet luxury of a scratch which had been becoming increasingly desirable for the last half hour.

The engines were in perfect trim according to the manual, or as near as they could be with that shaky main drive tube. If the Old Man had not had the fleet chasing around the galaxy on those fancy manoeuvres it would have been replaced weeks ago. He decided that when the *Groper* rejoined the flag ship, which was waiting in an orbit off the planet, he would demand a replacement.

Second Lieutenant Henry Nichols looked up from his glass as Bream entered. "All finished?" His fair moustache quivered moistly beneath his sharp nose.

Bream nodded. "Yes. Now all we've got to do is sit around here until those bug hunters have finished their act." He looked out of the view port, still scratching, but the first rare thrill was gone now. "That Parry gives me a pain. Imagine bawling me out like that for stepping outside the perimeter. I was only trying to be helpful."

Nichols joined him at the port. The ship stood on an area of lush grass, but not far away was the edge of a forest, its giant trees at least a hundred feet tall. "Don't worry about him, he's in a flap about those bear things they sighted yesterday. But he's right; regs say that no member of exploration ship personnel other than specialists in the performance of their duties shall leave a ship on an unclassified planet for a greater distance than one hundred yards from said ship."

Bream snorted. "You sound like the Old Man reading a court martial charge," he said reminiscently. "That's as dated as the one about a guardsman not sleeping more than so many paces from his horse. What could possibly happen to an able bodied spaceman on a peaceful little planet like AS341?" He shrugged. "Ah well, I suppose I shall have to sit around here and be bored in comfort." He poured himself a drink.

"At least we've got that," said Nichols with a grin. "I've just been in contact with the flagship. The Admiral is hopping mad; it seems their outer hull has been holed by meteors five times in the last twenty-four hours, and it's taking the duty crew all their time to patch the old tub up."

"I thought there was a lot of junk flying around when we hit this system." Bream folded his bulky form into an inadequate looking chair. "Isn't it about time you electronics boys came up with a better meteor evasion control than that old gimmick we've been using for so long?"

Nichols moustache quivered. "Shhh! Don't mention it. The Old Man's been nattering about it as long as I can remember, but nobody seems to come up with any decent ideas. What's really wanted is some kind of a doodad that will predict a collision orbit well in advance, and whoever figures it out will get some hefty promotion, believe me."

"Anybody that smart wouldn't be in the I.E.F. to start with," said Bream. "Anyway, there's one bright spot, if the Old Man is so uncomfortable up there he'll try to hurry this operation as much as he can."

"Maybe," said Nichols, doubtfully. "But we don't find an Earth type planet every day. He'll have to hang around until the specialists have extracted every last ounce of data, or H.Q. will want to know the reason why when he gets home."

"Anything from the other ships yet?" asked Bream.

"Meteorology and Geology have already reported back to the fleet with their data."

Bream grunted. "That means the Old Man will start chasing us any time now, eh?" The copter appeared over the trees, heading towards the *Groper*.

Nichols nodded. "Yes, and heaven help the last ship in." The copter made a shaky landing about twenty yards from the *Groper*. "That looks like our wandering boys now. Let's go out and see if they've found anything interesting."

"Anything interesting would hide if it got a glimpse of that character Parry," said Bream. He finished his drink and followed Nichols out into the corridor.

Parry and Lemon, the two biologists, were already unloading their cargo when the spacemen arrived. Parry's jacket sleeve was badly torn and the expression on his thin face was mean. Assorted examples of the wild life of AS341 either sat around in their cages petrified with fear, or made frantic efforts to escape, according to their disposition.

"Hi there, Parry, how goes the interstellar zoo? Got your bear yet?" Bream peered into one of the larger cages. Something about three feet long, with black and white stripes, snarled and spat at him.

"We can manage very well without your facetious remarks at this point," snapped Parry, his mouth closing like one of his own traps. "I hope I shall not have to remind you again that I am in command of *planetary* operations. I suggest you go back to the ship and leave us to our work."

Nichols spoke hurriedly as Bream started to tug at his beard, recognizing the gale warning. "Looks as if you had a bit of a rough trip." He pointed to Parry's tattered sleeve.

"Yes," snarled Parry. "It's these darned stun guns; they're not fast enough. We should be allowed to carry blasters; dead animals would be just as useful for most of our experiments. That little striped devil would have torn me to pieces if Lemon had not stopped in."

"Pity," murmured Bream, winking approvingly at the animal, which he had already mentally named *Felis Parryiensis*. "You're so hot on regs, you should know why the Exploration Council don't allow lethal weapons to be carried on alien planets. They don't want some trigger happy clown to start an interplanetary war with any local inhabitants who may have been overlooked in the preliminary survey."

"But, Parry is right, you know." Nichols was pouring oil with his usual efficiency. "Must get a bit dodgy at times." ..

Lemon, a short, stubby man with a natural tonsure, plumped a crate onto the grass beside them, and said: "Dodgy! That little striped so and so has a temper worse than my mother-in-law." He turned to Parry. "What *are* we going to do about those bear things? We'll have to get one, they're big enough to cause a lot of trouble if they started acting up."

Parry turned a shade paler. "I don't like it. I got a shot at one, but it didn't seem to make any impression."

"We were pretty far away," said Lemon. "Perhaps you missed. Beats me how the darned things dodge us. On foot, or in the copter, it makes no difference—they're always gone before we can get near them."

"What about letting us give you a hand?" said Bream. He had no particular desire to help Parry, but it sounded like one way of relieving the monotony.

Parry turned on him with a beady eye. "If you venture outside the prescribed perimeter for space personnel again, I shall personally see to it that you are court martialled, Lieutenant." He beckoned to Lemon. "We'll leave these specimens here for the time being, and go and have another try." He started to climb back aboard the copter.

"Mind the step," said Bream, tugging at his beard. He turned on his heel and walked back to the *Groper*.

On the afternoon of the following day, Bream and Nichols sat in the wardroom. There was nothing else to do. Parry had still not captured one of the animals and he and Lemon had gone out earlier for yet another attempt.

"I can't see why they have to bother about the darned thing," said Nichols, with a yawn. "There's only one other ship out now, and the Old Man's rarin' to go. If we're the ones who hold up the parade it's you and I who will get the blame, you know. I don't see how an animal as shy as that could cause any trouble for the colonists, so why worry?"

"You know Parry," said Bream disgustedly. "He wouldn't take a chance on submitting an incomplete report, even if it meant analysing every blade of grass on the planet." He slammed his glass down on the table and walked over to the view port. "It's no good, Nick. If I sit around here any longer, I shall blow my jets. Seven days, with nothing else to do but look at a few acres of grass and some trees! That's no life for a spaceman. I'm sure AS341 has something more interesting to offer than this." He stood for a moment, thoughtfully scratching his black beard.

"What are you going to do?" said Nichols, frowning.

Bream unhooked a holster belt, complete with stun gun, from the wall and buckled it on purposefully. "I'm going out for a look around."

Nichol's moustache fluttered. "But the regulations—what if Parry comes back?"

Bream made a derisive noise. "Tell him I'm down in the engine room and I don't want to be disturbed. At least *that's* my territory, so he won't come down to check up on me." He stalked out of the room, ignoring Nichol's protests.

Once out of the ship, he headed straight for the forest. The grass was pleasantly yielding beneath his feet and the air had a cool tang, like a spring morning back on Earth.

He was soon in the twilight world of the forest. Most of the trees were over a hundred feet tall, with glassy smooth trunks ending in a mop of foliage at the very top, from which was suspended clusters of something which was probably fruit. Whatever sports AS₃₄₁ offered, tree climbing was not one of them. He walked jauntily through the alien forest, hearing an occasional rustle as small animals scurried for cover at his approach.

There was a slight rustle overhead, and something landed with a squelch a few yards in front of Bream. He stooped to look. Nothing remained but a damp patch on the ground which exuded an interesting, sweetish smell. The ripe fruit had disintegrated completely under the impact of its long fall.

His scalp twitched, and he suddenly had the discomfiting feeling that he was being watched. He straightened up quickly.

A large animal was standing about fifteen feet away. It was all of twelve feet tall, with legs that seemed as thick as the tree trunks. Its torso was like a black fur-covered barrel, and the head, placed casually on the shoulders with little or no neck intervening, was disproportionately small. It was somewhat similar in shape to that of a King Charles spaniel, ears and all. The creature's arms were of the same massive structure as the legs, ending in great, clawed paws.

Bream realised with a gulp that this must be the bearlike animal for which Parry had been searching. The six foot Earthman and the twelve foot alien monster surveyed each other in silence for a moment, then the creature grunted and started forward. Bream whipped the stun gun from his holster and fired.

There was no visible effect.

A potted version of the life and times of George Bream flashed through his mind as the monster lumbered forward, gathering speed. After another frantic shot with the stunner, which theoretically should have felled a herd of mammoth, he turned and started to run. Bream was no coward, but there were limits.

He managed only a few paces before he felt a tremendous blow on his shoulders and fell face downward in the dirt, completely winded. He held himself perfectly still for a moment, waiting for the final blow. When nothing happened he rolled over and looked up.

"*Wunkle !*" grunted the beast. It was squatting a few feet away from him, holding a large purple fruit in its outstretched paw. Bream searched his mind frantically for an interpretation of the creature's facial expression—and came up with the astonishing conclusion that the thing wanted to make friends with him. Could it be the beard ?

"*Wunkle !*" said the beast again. It thrust the fruit forward.

Bream shrugged and took the offering. He looked at it carefully, rich and purple, with an unblemished skin. Possibly poisonous, he thought with a qualm. He looked back at the Wunkle—what else could he call it ?—and wondered how it had got hold of the fruit. It certainly did not have the build for climbing trees, even ordinary ones, and the things disintegrated when they hit the ground.

A question of procedure was bothering Bream at that moment. Should he sit and eat the fruit in a companionable manner, or should he get to hell out of there, before the Wunkle decided to knock his brains out ? Deciding on a compromise he bit into the fruit, nodded in a friendly manner to the beast and turned slowly. He rose to his feet and began to *walk* back in the direction of the ship.

A crackling of undergrowth told him that the Wunkle was following, but he kept on walking, the fruit gripped in his clammy palm. Every time he put it to his mouth he felt uncomfortably like something in the front of a pork butcher's window display. Finally, when he figured he had lost about ten years growth, he just had to sneak a peep over his shoulder. The Wunkle grunted and continued to follow him at a companionable distance.

If he made a break for it the animal would probably attack him so he kept up the steady pace, despite the fact that every nerve in his body was screaming at him to run.

He was almost to the edge of the forest when he heard the creature overtaking him. This is it ! he thought, helplessly. But the Wunkle carried straight on past him. It stopped suddenly, with its back towards him, and stood very still, its arms outstretched.

There was a slight rustle in the foliage above, and something dark flashed downwards towards the Wunkle. *Thunk !* The animal bent its knees, as if cradling the impact, then turned to Bream displaying another one of the purple fruits in its large paw.

Bream scratched his beard and cocked one eyebrow. How the heck had the Wunkle known that the fruit was going to drop in that precise spot at that precise moment ? The sight of sunlight glistening on the

hull of the *Groper* through the trees ahead chased the question from his mind. He started to walk again, carefully circling the beast.

He felt happier out in the sunshine, but he could hear the swish, swish of the Wunkle's legs through the long grass as it followed him.

Nichols was sitting on the ramp of the *Groper*, searching the forest with gloomy eyes. When he saw the approaching duet he waved his arms, opening and shutting his mouth soundlessly for a few seconds. Then, with a yelp, he bolted like a startled hare into the ship.

Bream walked on, his body still tensed. Reaching the ramp, he turned. The Wunkle stopped a few yards away and squatted down in the grass. It grunted again, then proceeded to eat the fruit happily.

"What is that?" said Nichols, reappearing. His crew-cut stood to attention as his moustache fluttered like the U.N. flag. In each hand he held a stun gun.

Bream, pretty certain by now that the Wunkle's intentions were strictly honourable, decided to do the big stuff.

"You mean the Wunkle?" he said, casually. He pointed to the stun guns. "Might as well put those rib ticklers away—they don't bother him a bit."

"Yes, but . . ."

"Don't worry, Nick," said Bream, airily. "He's quite harmless, strictly vegetarian. Intelligent too—seems to have taken quite a fancy to me."

At that moment the copter reappeared over the treetops.

"Ah, the bug hunters," said Bream. "This should be interesting."

As soon as the copter touched the ground Parry and Lemon leaped out into the grass and started to stalk the Wunkle. When they were in range they began to fire their stun guns.

The Wunkle spat out a stream of pips, made a grunt that sounded suspiciously like a burp, and ambled off in the direction of the forest with the amiable unconcern of a middle-aged gentleman heading for the buffet.

Parry and Lemon ran over to the ramp and joined the two spacemen.

"Don't let that thing get away!" shouted Parry. "Why don't you do something?"

"What do you suggest?" said Bream with a leer. "Anyway, you're in charge of planetary operations, mister."

"I've been trying to get hold of one of those things for a week and you let it walk away," frothed Parry.

"On the contrary," said Bream happily. "We were getting along swimmingly until you came along, weren't we, Nick? It was you who broke up the party." Privately, Bream was still thanking his

stars for his lucky escape, but it was worth taking a bit more of a risk to needle Parry. "Tell you what I'll do. If you boys promise to behave yourselves and put away your artillery I'll go along and see if I can persuade my friend to come back."

"You've no business fooling around with alien animals," gnashed Parry. "That's my department."

"Fair enough," grinned Bream, waving an arm in the direction of the forest. "Go get him!"

Parry dithered for a moment, looking at his stun gun. The Wunkle was big.

"Had a call from the flagship a couple of hours ago," said Nichols, casually. "Admiral wants to know what's holding us up."

Parry swallowed his pride visibly. "All right, Bream. This is very irregular, but you'd better see what you can do. Understand that as soon as it gets here, you're to leave everything to Lemon and I. We've had more experience of dealing with alien life forms than you, and the tests must be completed as quickly as possible."

Bream walked off towards the forest. The Wunkle was standing very still beneath the trees, paws outstretched again. *Thunk, thunk.* A fruit landed in each of its paws as Bream approached.

"Hey, you!" said the spaceman.

The Wunkle turned towards him and offered one of the fruits with a friendly grunt. Bream accepted, and started to walk back towards the ship. The Wunkle followed him.

"O.K., Parry, he's all yours," said Bream. The biologist approached the animal, his right hand hovering nervously over his stun gun. Bream walked up the ramp into the ship.

Half an hour later, Lemon came into the wardroom. He ran a chubby hand through what remained of his hair, and breathed deeply.

"What goes?" grinned Bream.

"I don't know, I honestly don't," said the biologist. "I've never struck anything quite like it. Give me a drink, for Pete's sake." He handed a sheaf of papers to Nichols. "These are all right for transmission to flagship."

"Having trouble?" Bream asked.

"That's the point," said Lemon. "We're not. We started by running the standard intelligence tests on the Wunkle for an animal of its general type, but it breezed through them, so we gradually stepped up the difficulty. It has no lingual ability, of course, but on non-lingual tests the darned thing seems to be a genius, equally as intelligent as the average man. It doesn't seem possible, considering

its environment—but there could be one other explanation for the high performance figures.”

“And that is?” said Bream, with interest.

Lemon gulped down his drink. His eyes were wild. “Maybe it sounds crazy, but Parry thinks that it’s getting the answers to the tests from our own minds.”

“You mean the Wunkle is telepathic?” said Bream.

“That’s about the size of it,” said Lemon. “In a receiving sense, at any rate. It ties up with the facts. Look at the difficulty we’ve had in capturing one, the way they disappear before you can get hold of them.”

Bream caressed his beard lovingly. “This I must see,” he said, rising.

Parry was sitting on the grass, surrounded by a pile of test manuals and apparatus. There was a dazed look in his eyes. The Wunkle rose to its feet as Bream approached. It placed a paw lightly on his arm, then walked off back towards the forest.

“I think he wants me to follow,” said Bream. “What do you suggest, *expert*?”

“Get lost, the pair of you,” snarled Parry. “I need time to figure this thing out.”

Bream eyed the retreating back of the Wunkle with a new respect. As he moved to follow he heard a shout behind him. He turned, to see Nichols approaching hurriedly.

“Just got orders from the flagship, George,” said the electronics man. “The other ship has just checked in and the admiral wants to get moving. They say that the last lot of reports I sent in for Parry will be enough for a preliminary survey. We’re to drop everything and rendezvous with the fleet in half an hour.”

“Fine,” said Bream. “But what about the Wunkle?”

“They say so long as it’s harmless we can leave it to the next expedition to figure out,” replied Nichols. “Those meteors have really got the Old Man rattled. Right now he is more interested in getting his ship out of this system in one piece than in any alien life form.”

Bream nodded and they started back towards the ship. He was whistling softly. Loafing was all very well, but when he was controlling a ship he was really living.

Nichols looked back uneasily over his shoulder at the Wunkle. It had turned and was lumbering along behind them. “How are you going to get rid of that?”

“Don’t worry about him, he’s harmless enough,” said Bream, confidently.

Parry was still sitting, poring over his books and making small clicking noises.

"Better forget about it," said Bream. "We're blasting off in ten minutes, so you and Lemon had better get started emancipating your little zoo." It felt good to be in command of the situation again.

He placed one foot on the ramp. There was a sudden howl of anguish from behind him, and a furry arm wrapped round his body. The Wunkle jerked him from his feet and made for the forest, carrying him gently. Bream shouted, wriggled and kicked in a vain attempt to break the creature's grip. Just inside the rim of the trees he was placed back on his feet, but the restraining arm stayed in place.

"What are you trying to do?" shouted Bream, on the principle that loud, clear English should be understood, even by a Wunkle. He was more annoyed than frightened. "Let me go, you flop-eared freak, I've got work to do. The holiday is over, understand?" He underlined his remarks by pulling out lumps of black fur and throwing them in the creature's face, but it did no good.

Bream was in a spot. If the *Groper* did not make her rendezvous with the fleet, the Old Man would have his hide, maybe even his command, which was worse. Apart from that, there was the question of the Wunkle's intentions; Bream's opinions on this matter had changed suddenly in the last few seconds. He looked back towards the ship frantically.

Nichols appeared, followed by Parry and Lemon. All three were carrying stun guns. They ran towards Bream and his captor. Parry had a particularly nasty sneer on his face, which said 'I told you so' in very plain language.

"Hold on, George," said Nichols.

"Are you kidding?" yelled Bream, as the Wunkle tightened its grip at the sight of the other humans.

Nichols took careful aim and fired his stun gun. The Wunkle didn't even bat an eyelid. Bream winced as he saw Parry level his weapon; that man couldn't hit the flagship at two paces, even if he was trying. He felt the jolt of the beam as it passed his right ear.

"Hey! be careful," yelled Bream, as the three of them began to fire at random. The Wunkle took the combined charges of the stunners without even a shrug. In fact the darned thing seemed to thrive on it, reflected Bream bitterly.

Nichols lowered his overheated weapon. "Sorry, George. We don't seem to be doing any good. What do you suggest?"

Bream grunted as the Wunkle hugged him closer.

"Logically there would seem only one course of action." Parry looked down his long nose with considerable satisfaction. "I believe you are capable of piloting the *Groper*, Lieutenant Nichols?"

"Of course," said Nichols. "But we can't leave Bream here with that thing, if that's what you're suggesting."

"Only temporarily," said Parry. "I'm sure there's no need to worry about any violence—the beast has obviously formed some sort of an attachment for the Lieutenant and is loath to see him leave. The only weapons we have are these stun guns, which have no effect on the beast, so we are incapable of rescuing him under the present circumstances." He grinned nastily. "On the flagship, however, there are all types of weapons . . ."

Bream groaned; he could feel the bars on his shoulders fading away. This was just the sort of practical suggestion he might have expected from Parry.

". . . we make a rendezvous as arranged, with Lieutenant Nichols as pilot," continued the biologist. "Once there, we can explain the situation to the admiral, who will see that we are supplied with suitable weapons to effect a rescue."

Nichols scuffed his boot in the grass and looked shamefacedly at Bream. "Looks like the only way, George." He glanced at his wrist watch. "We'll have to be leaving soon—you know what the Old Man is for time. What do you say? We can get you away from that thing in a jiffy with a blaster."

Bream considered. Technically he was in command, and therefore responsible if the *Groper* did not reach the fleet on time. He had no choice, Parry, blast him, had hit on the only solution.

"O.K., Nick, you'd better carry on," he said, ruefully. "But I hate to think what the Old Man will say."

"This only goes to show the folly of allowing unqualified personnel to tamper with alien life forms," said Parry, as the three of them turned and made their way back to the ship.

Bream snorted. *Tamper*! He felt very much alone as the ports of the *Groper* closed.

As the ship began to leave the ground, the Wunkle picked Bream up again and headed through the trees, moving very fast. The sound of the drive became inaudible as the creature crashed through the undergrowth.

A few minutes later Bream heard a terrific explosion some way ahead of them. The Wunkle did not slacken its pace, and soon they were out of the forest travelling through open country. Bream, travelling head downwards, could see nothing but the long grass.

The Wunkle stopped its career finally and placed Bream on his feet again. His mouth fell open in amazement. They were standing on the edge of a large crater, at the bottom of which lay the crumpled remains of a spaceship. The *Groper* !

The Wunkle grunted, pointing upwards. Three dots in the sky grew larger every second, until they resolved themselves into the figures of Lemon, Parry and Nichols, floating down cushioned by their anti-grav safety belts.

"What happened, Nick?" shouted Bream, as the electronics man landed about twenty yards away.

Nichols picked himself up, badly shaken. "You were right about that main drive tube. It blew out fifty seconds after blast off."

Bream walked across to him, followed by the Wunkle, just as Parry and Lemon landed nearby.

"This is gross inefficiency!" raved Parry. "An incompetent pair of idiots like you should never be allowed to run an exploration ship."

"Aw, keep your shirt on!" snapped Nichols. He turned to Bream. "Why does he always have to be so right? They'll have to send someone down to fetch us; the *Groper* looks like a total wreck. We're for the high jump—the Old Man will flip his lid."

The Wunkle grunted and went over to stand expectantly beneath a solitary, nearby tree. Bream watched as something dark fell from the top knot of the tree and landed in the animal's paw with a thunk.

"Did you see that, Nick?" he said, scratching his beard industriously. Suddenly he didn't care about the admiral's blood pressure any more.

Nichols eyed him warily. "Yes, sure, George. The thing is hungry. So what? We've got trouble, remember?"

"Telepathy, my left eyebrow!" whooped Bream. "Tell me, Nick, what does the Wunkle live on?"

"Those fruits, I suppose," said Nichols, baffled.

"Bright boy," said Bream. "And how does he get the fruit?"

"They fall off when they're ripe, don't they?" said Nichols. "Sometimes I suppose it's lucky enough to catch one; others it picks up off the ground."

"No, Nick, windfalls are out." Bream's eyes gleamed. "You've got to catch these things as they fall; once they hit the ground they disintegrate. *The Wunkle catches them every time.*"

"That's impossible," said Nichols, edging away. "To do that, it would have to know precisely when and where the fruit was going to fall."

A laugh rumbled out of Bream's beard. "Exactly! Parry had me up the wrong alley for a bit, but now I can see it. How do you think

the Wunkle breezed through those tests of his? Take it from me, the Wunkle is no fool, but he was cribbing on that little examination. We've got some animals back on Earth like the elephant and the giraffe that have made physical adaptations in keeping with their feeding habits, but the Wunkle has got them all skinned.

"Why do you think he wouldn't let me get back on the ship? He *knew* that the *Groper* was going to crash, and the exact spot where it would land; just the same as he knows when those fruits are going to fall. The Wunkle isn't telepathic, but he *is* clairvoyant, which is far more useful as far as we are concerned."

Nichols shook his head miserably. "I don't get it, George. But we're going to need some kind of help pretty soon. When the Old Man hears what has happened to the *Groper*, he'll . . ."

"You'll both be dismissed from the service—after you've served twenty years on Ganymede," said Parry, with chilly satisfaction.

"Not on your life!" said Bream, grinning. "What's one measly little exploration ship? He's been sitting up there for a week, expecting to have his head blown off by a meteor any minute—and we've got the answer to his problem. Remember what you were saying about a meteor predictor, Nick?"

He pointed to Wunkle. "Meet the Bream Nichols Meteor Evasion Device, Mark I. None of your fragile electronic gimmicks, just keep him well fed and happy and he'll operate with one hundred per cent efficiency for a lifetime."

"*Wunkle!*" burped the device, and spat out a stream of pips.

Dan Morgan.

Science Fantasy No. 18

The next issue of our companion magazine will be published in April and contains a long novelette by John Brunner entitled "This Rough Magic," plus a variety of short stories by authors Jack Williamson, Brian W. Aldiss, Dan Morgan, Ian Wright, John Kippax, and others.

We regret that this issue is again a little late, due in part to the recent printing difficulties.

Most readers will remember Chad Oliver's delightful short story "Any More at Home Like You" in the September 1955 issue. This month we present a gem of a story by him—anyone who thinks that the Martian locale story is played out will revise their opinion within the next hour.

ARTIFACT

By Chad Oliver

Illustrated by QUINN

Late August, 1971.

Far above a field in New Mexico, above the blue sky itself, a ship decelerated and floated down toward the Earth. The close star that had seared through blackness lost its nakedness and became the golden sun. White clouds touched the ship that had come from emptiness.

Hundreds of miles away, across half the state of Texas, Dr. Dixon Sanders sat in his university office and looked out the window. The cool breeze felt good after a hot summer, and the August rains had stroked green across the land.

He did not know that man had landed on Mars for the first time. He did not know what men had found there.

Three days later, Sanders got the call from Washington.

One hour after he had received the call, he climbed into a jet and was flown to a field in New Mexico. There was no spaceship in sight. He saw only a thick concrete blockhouse, two spidery structures that looked like radio towers, anti-aircraft missiles and sheds. There were jets patrolling the skies.

A copter lifted him four miles to a neat new settlement in the desert. The houses were white and compact, and concealed irrigation channels had turned the area into an oasis with green trees, grasses, vines and flowers. A big lettered roof sign read: *Welcome To Gila Monster Sinkhole*. A smaller sign was more official: *Greenacre, New Mexico. U.S. Government Property. Landing Prohibited.*

They landed.

A shaded roof path carried them across six houses, and at the seventh there were three military policemen guarding the roof door. They walked inside and a cool stairway led down into a rustic reception

room. Two more MP's opened a side door for them. Sanders stepped inside. He still knew a general when he saw one, and the impulse to salute was almost uncontrollable.

"You're Sanders?"

"That's right."

"A pleasure to meet you, sir. Have a chair, won't you?"

Sanders sat down, slightly stunned at being addressed as *sir* by a general.

"I'm General Ransom, Sanders. Intelligence. I want you to know how much we appreciate your coming up here like this."

"No trouble at all." Sanders wanted a cigarette. The general was a big, pleasantly ugly man with grey hair and sharp blue eyes. Sanders rather liked him.

"You realise, naturally, that what you see and hear in this place must be treated as top secret information. We're counting on your discretion."

"I understand that, General Ransom."

"Okay." The General paced across the room and then sat down behind his desk. He unlocked a drawer and took out a small box. The box was three inches on a side. It was ordinary enough in appearance, although it was metallic. The General drummed his fingers on his desk. Then, abruptly, he slid the top off the box and handed the box to Sanders. "In your opinion, Dr. Sanders, what is that?"

Sanders took the box and looked inside. "Can I take it out?"

"Certainly."

He took the object out and held it in his hand. It was a piece of brown rock two and a half inches long by two inches wide. He examined it carefully. The top of the rock was smooth and worn. The bottom had been neatly chipped by pressure-flaking to make a V-shaped edge. The flake scars were clearly visible. Looked at from the side, the object was slightly concave on its worked edge. He gripped it with the smooth top surface in the palm of his hand.

"Well, Doctor?"

"I assume this is important, for some reason?"

"Very important."

He picked his words with care. "It's made out of flint or chert, or something closely resembling it. The bottom edge has definitely been worked—I'd say by means of indirect pressure-flaking. In my opinion, it's an artifact—a tool made by man. It may be a scraper; that's a common tool used to flesh hides and that sort of thing. Hard to tell what it was used for, though. It's a fairly crude implement, but it's well made of its type. Nothing too unusual, I'm afraid."

The General leaned forward. "How old is it?"



Sanders shrugged. "Sorry, but I can't tell that from the scraper alone. Most of them are pretty much alike, and you'll find them all over the world and from the early Pleistocene right on down to the present. If it was found in association with bones or charcoal or pottery or projectile points—damn near anything—or if it was found eroding out of a datable geological stratum, I might be able to take a stab at it."

"It was found all by itself, on the surface of a desert," General Ransom said, smiling.

"Then dating it would be just guesswork, really."

"But it *is* an artifact?"

"I'd say so, yes. I didn't know you boys were so interested in primitive cultures."

"That," said the general, "would depend on where the primitives are."

"Apaches on the warpath again?"

"No—though we do have one over at the field who's a first class rocket engineer. I wish the Apaches were all we had to worry about. Tell me, Doctor, if you, as an archeologist, had to find out more about this little gadget—who made it, how old it is, that sort of thing—how would you go about it?"

Sanders frowned. "I'd go back to where it was found and try to find another one in place. If we could get one in a dig—excavate it, that is, association with some other stuff—we should be able to give you more information on it."

"Would you be willing to undertake such a search, doctor, if the government asked you to do so?"

"Certainly, if it's important. I have classes to think of, of course. Where did it come from, anyway—somewhere around here?"

"That's one way of looking at it, Dr. Sanders. It came from Mars."

He was a little slow on the up-take. Then it hit him. "But that means—"

"Exactly," said General Ransom.

He was a little surprised at his own calm acceptance of the fact that men had landed on Mars, but then he had been expecting it, really, along with everybody else.

But an artifact was something else again.

An artifact was a tool made by man.

Or by something like a man?

"Why me?" he asked. "I'm no spaceman. I like it here."

"I'll be perfectly frank with you. Our expedition was made on a strictly hush-hush basis; that isn't necessarily the way I would have preferred it, but with the world situation the way it is that's the way it had to be. Sooner or later, the news has got to be released. We've got a knotty little job ahead of us at the United Nations. We have no right to keep that artifact quiet, and when we talk about it there are some questions that have to be answered. Do you understand me?"

"Well, I see why you need an archeologist. Why me?"

"We can't force you to go."

"I realise that. I just want the reasons."

Ransom ticked them off. "One, you can be trusted. Two, we feel you're the man for the job—well trained, but with a shot or two of imagination. Three, you're in good shape physically—though an examination will have to clear you officially, of course. Finally . . . may I be blunt?"

"Sure."

"Your wife divorced you I understand."

The old pain stabbed at him, but he kept his face expressionless.

"That's right."

"Your parents are dead. You have one son in the oil business. You don't get on with him too well."

"Ycs."

"You've chosen to work at a small private college. Your absence can be covered."

"In other words, I won't be missed if I don't come back."

"I wouldn't put it quite that way."

Sanders looked at the artifact in his hand. He put it back in the box and handed it to Ransom. "I'll do what I can."

"We're grateful, Sanders. You can pick your medal if you want one. And don't worry: we'll get you there and we'll get you back. That ship can carry three men. Your pilot will be Colonel Ben Cooper—he made the first flight, so he's the best we've got. You pick the other man. You know what we want, and you know who you can work with best."

Sanders didn't hesitate. "That'll be Ralph Charteris over at Santa Fe. He's thirty-eight, he knows his stuff, and he's technically unmarried. He's a research man, so nobody'll think it is funny if he disappears for a spell."

"Got you. Takeoff will be in ten days. You'll want to get things in shape."

"Okay."

The two men shook hands.

The ten days went by in a hurry.

He made out a will, a job he had been postponing for years, and managed to spend a day fishing with two friends in Matagorda Bay.

He phoned his son Mark in Houston. Their talk was unsatisfactory as usual, full of forced heartinesses. He couldn't tell him where he was going, and he was glad when the call was over. He didn't call Ellen.

The ship lifted on schedule. Within an hour there was no blue sky.

He thought briefly of himself: forty-two years old, on the thin side, horn-rimmed glasses. He probably looked a lot like a professor. He felt singularly out of place in a spaceship.

He looked at the screen. He saw cold stars and a frozen sun. He saw black distances and long, long silences. He saw his own life far

away and lost: a life that had been too lonely, and too fast. He stopped looking.

The atomic drive was soundless except for a high, irritating vibration that seemed part of the ship. Magnets kept him anchored and after an initial vertigo the weightlessness meant an annoying indigestion and little else.

They had some good bourbon, and it helped.

They were neither hot nor cold.

Ralph Charteris was a big blonde giant of a man, and little Ben Cooper always referred to him as the biggest mass on the ship. "Let's talk about rocks, Sanders," he said. "Tell me what the devil that scraper was doing on Mars—figure it out in true Boy Scientist fashion so we can turn around and go home."

Sanders smiled, sipping his bourbon. He liked to talk, although he knew it was just a device for getting outside himself. "I'll give you six fast answers, Ralph."

"Fire," Ralph said, chewing on an empty pipe.

"Here's the deal. A ship—the first one, mind you—lands on a supposedly uninhabited planet. It's mostly all desert and a yard wide, as I understand it, and the air is shy on oxygen. We've all been solemnly assured by our astronomical colleagues that people like ourselves couldn't exist on Mars. Oh, maybe some outlandish freak without any carbon molecules in his carcass, but not *people*. So what do they run tight smack into? An artifact. Nothing queer or strange or alien. Nothing to make them swat their helmets and holler, 'Them's Martians by gum!' Just a perfectly ordinary scraper—it's a miracle that botanist spotted it at all. So what's the most logical explanation, the one that strains the credulity the least?"

"It's a hoax," Ralph said quietly.

"You thought of it too, hmmm? The simplest way for that scraper to get there would be for one of the men to have picked it up on Earth, carried it to Mars, tossed it on the sand, and then 'discovered' it. The botanist could have done it."

"I don't much think Schlicter was a dishonest man, Sanders," Ben Cooper said.

"Remember Piltdown," Ralph said.

"Exactly. I don't say that Schlicter planted that scraper—I just say that's the simplest explanation."

"Let's have some more ideas."

"Here's another: the artifact is not native to Mars, but was left there by a party of interstellar travellers. In that case, the catch is why they would leave a flint scraper behind. I can't figure a culture with spaceships and scrapers."

"Maybe they were shipwrecked," Ralph suggested. "Maybe one man was left behind, thrown on his own resources."

"Can't see it," Ben Cooper objected. "What's he supposed to scrape with that thing—sand pies? We didn't spot any animal life to speak of, except for those little things that looked like moles."

"Still, we can't rule it out," Sanders said. "Try this: there has been some contact between Earth and Mars we don't know anything about. A ship came here maybe half a million years ago, dropped the scraper for some reason, and hightailed it back home."

"This space travel does great things for the imagination," Ralph said sourly.

"I'm trying to name possibilities, no matter how far-fetched. I'm aware, I think, of the mythological nature of Atlantis, Mu, Lemuria, and the Lost Continent of Lake Erie. Remember the old dictum of Mr. Holmes: eliminate the impossible, then hang on to what's left."

"What *is* left?"

"Number four: just like the last one, but the ship came from Mars, picked up the scraper on Earth, came back home and dropped it. Maybe it happened a million years ago. Since that time, Mars has lost her civilisation and her cities are covered with sand. And *don't* tell me civilisations can't disappear."

"Sounds pretty gassy to me."

"They had to dig to find Troy. They had to dig to find some Biblical towns. You already have to dig to find some of the army forts on the American frontier—and they're only a few hundred years old."

"It's your theory, friend."

"Number five," Sanders continued, running a hand through his sandy hair. "Man evolved on Mars then migrated to Earth, maybe half a million years ago when water got scarce. In other words, the primate evolution evidence on Earth is misleading."

Ralph Charteris bit down hard on his pipe stem, and then remembered to relax. "You're kidding. How about the South African stuff—Australopithecus, and all that? How about Pithecanthropus? Sinanthropus? Neanderthal? Swanscombe? How come when they got to Earth they went back to living in caves and rock shelters? Dammit, Sanders, you're trying to make me sore."

"Not at all. Here's my parting shot: that artifact was left on Mars by some representatives of a galactic civilisation. It was left there on purpose, for us to find, as a kind of I.Q. test. They want to see how we handle the situation. How's that?"

"You're a wild man with a theory, Sanders."

"Listen, Doc," Ben Cooper said slowly. "What do you *really* think?"

Sanders looked at him and shook his head. "I don't know, Ben," he said. "I just don't know."

They didn't have much to say after that.

They started up a poker game with magnetized cards.

They waited.

Seventeen days later, the ship landed. They put on their airsuits and stepped outside.

There was no wind and they stood in utter silence. The ship had come down on the flat top of a mesa. Small, thorny plants with tiny green flowers were scattered loosely between worn outcroppings of reddish brown rock. The mesa was not high, and at its base was the desert, a motionless sea of gently rolling sand, so light brown that it almost appeared white.

The sky was a deep blue, very close to a cold black directly overhead but somewhat lighter near the horizons. There was one large dirty yellow cloud hanging just over the desert floor to the south.

Sanders shivered, although it was not yet cold. He blinked his eyes, grateful for the filter lenses in his airsuit. The sun was brighter than he had ever seen it on Earth, and it was a fierce, naked brightness that pelted the low hills and deserts with shattering attacks of light.

Here, in the lost immensities of a strange and silent world, his glib theories of a few days ago could find no expression. Here were fundamentals, and the raw truths of simplicity.

Quite casually, as though unimpressed by the enormity of the moment, a creature that looked too much like a gopher for comfort stuck its head out from behind a rock and surveyed them with decided suspicion.

Sanders eyed the gopher the same way.

"Well," Ralph said into his suit mike, staring out at the glaring wastelands, "I'd settle for a needle in a haystack any day."

A planet is huge, Sanders thought. You cannot imagine how great it is. Suppose some creatures came to Earth searching for artifacts, and all the people were gone. Where would he look? How long would it take? How many undiscovered sites are there on Earth, even today?

"Ben," he said, "can you see where the scraper was found from here?"

Ben Cooper shook his head. "I set her down as close as I could figure to where we landed before, but it's hard to get your bearings here. We're close, I'd say—maybe fifty miles. We could get the copter out and spot it—we left a big circle of rocks on the sand."

Sanders looked out. It was like standing on the beach of an ocean. There were winds on Mars, and dust storms. When the winds blew, the sands shifted. It was a lousy spot to do archeology.

"What do you think, Ralph?"

Ralph put his hands on his hips. Even he was dwarfed by the vastness around him. "No point in digging up the Sahara, I guess. The scraper was a surface find, and Schlichter said he couldn't find a site under it. If there's one artifact, and this deal is on the level, there must be another."

"I'll buy that. How about this mesa?"

Ralph shrugged. "We don't know what we're doing. How do we know where they lived? One place is as good as another."

Sanders examined the ground. "Lots of erosion. But those rocks and plants held the soil down pretty well. Probably phenomenal root systems on those plants—no water that I can see. It beats the desert. It *feels* like the kind of a place . . ."

The excitement grew in him.

"Let's have a look," Ralph said.

The three men split up and started to search the mesa, moving in the peculiar bent shuffle of a man trying to spot flaked stones on the ground.

The ship stood quietly behind them; it rested on the thorny plants and was nothing against a backdrop of emptiness.

The sun was white and cast sharp black shadows. The temperature was a comfortable fifty degrees Fahrenheit. There was no breeze and not a sound.

Sanders wanted a cigarette, but couldn't figure out how to light one in his airsuit. He moved rapidly, his eyes on the ground, looking for rock concentrations, or fired rock, or bones, or flake chips. He found that the slight gravity affected him hardly at all, except that he felt stronger than usual. He was content.

This was the part of archeology he liked best: you were alone, far from the cities, and the next hill was never too far away.

It took him three hours to find what he was looking for. By then the sun was lower, and it was growing cold.

"Over here," he said into his suit mike.

He didn't touch anything. Ralph and Ben came over in great leaping bounds, and the three of them got down on their knees and stared.

It wasn't anything much. The soil looked a little darker than the surrounding area, and there was some cracked rock. The darker soil made an irregular circle about four feet in diameter. There was a green flower growing in the middle of it.

There were flint chips.

There was one core, with long flake scars on it.

"Get the camera," Sanders said.

The night was very cold and filled with stars. Phobos was visible, but unimpressive. The men slept restlessly. Next day, they went to work.

They mapped the site and plotted a north-south line and used string to lay out the area in two-foot squares. They got their notebooks and centimeter sticks ready.

Sanders and Ralph got out their small triangular trowels and began to scrape the surface of the site, very gently. Ben Cooper watched. At first, he almost held his breath.

After six hours without results, it was less exciting.

They took it down in two-inch levels and filtered all the dirt through a fine mesh screen. They worked all day and found one flint chip.

The next day they found nothing at all.

Late in the afternoon of the third day, when they were ten inches down, Ralph's trowel scraped something hard. He stuck his trowel in the hip pocket of his airtuit and took out a small whisk broom. Very carefully, he brushed the dirt away. Sanders came over and watched.

The uncanny thing was the complete familiarity of the scene. They had both dug sites like this a hundred times, and with the same results.

Ralph uncovered a broken projectile point.

They measured its exact position in the site and photographed it in place. Then Ralph lifted it out and handed it to Sanders. The base of the point was intact, with two neatly chipped shoulders. Both sides of the thin point were nicely flaked. The tip was broken. The whole thing, without the tip, was a little over three inches long and an inch wide.

"Arrowhead?" asked Ben.

"Probably not," Ralph said. "Too big for that."

"Unless," Sanders smiled, "whoever made it was a giant."

"Cut that out, Sanders."

"Okay. Provisionally, it's a spear point or a knife. That's what it looks like to me."

"Bag it."

Sanders placed the point in a cloth bag and labelled it. Then he took up his trowel and went back to work in his own square.

When night fell they had discovered nothing else.

They stuck with the site for ten days. Before they were through, the gophers had got used to them and came over to watch them dig. The site played out at the four foot level. They had found two scrapers, one more broken point, and a piece of charred bone. The bone was not human; it was quite small and seemed to be a femur of some sort. There was no pottery.

"Well," Sanders said, "we may be able to get a radio-carbon date on that bone when we get back, but I don't know how good it'll be. Otherwise, we don't know beans about the geology—if that's the word I want—and there's no telling how old the stuff is. It wasn't left here yesterday, though."

"We *do* know something now."

"Yes. These artifacts are indigenous; nobody brought them here. It looks like we've got the remains of an old hunting and gathering culture, but we can't very well generalise from one site."

"In other words," Ben Cooper said, "there were Martians."

Sanders walked over to the edge of the low mesa and looked out across the desert sands, his mind filled with questions.

The silence came in from a long way off.

The desolation was old and patient and overwhelming.

"Come on," he said. "We've got a lot of work ahead of us."

Sites were not difficult to find.

The land had evidently been abandoned for a long time, and had been undisturbed. They spent a month sinking test pits and making surface collections, and then took the big-bladed copter from the ship and made two long flights in opposite directions.

Wherever they went, the story was the same.

Widely scattered artifacts, all of which could have been fitted into the Paleolithic of Earth without too much difficulty. Nothing that could be classed as Neolithic. No pottery, no traces of agriculture. No skeletons. No cities, no towns, no villages.

The land, Sanders thought, must always have been desperately poor. The food supply was uncertain, the water scarce. People must have lived in small, widely separated bands, spending every minute trying to stay alive. It would have been tough.

The lack of skeletons was not particularly surprising; old skeletal remains were always rare, and a man dropped more artifacts than bones in a lifetime.

They saw one large snake that vanished into the rocks before they could catch him.

"There's just one question left," Sanders said slowly, "and that's the big one. Are we dealing with an extinct form of life, or aren't we?"

"I was wondering myself," Ben said. "You take back in New Mexico and Arizona, now. You find lots of old places like the ones we've been digging up—some of 'em go back maybe ten thousand years they tell me. Just the same, the Indians are still there."

The silence of the centuries covered the land.

"The country seems abandoned," Ralph said, sitting on a rock. "These people weren't far enough along for space travel. So where could they have gone?"

"Let me ask you a question, Ralph," Sanders said. "If you're in a strange country and you're looking for a place where people have lived, what would be the quickest way to find it on Earth?"

"Go where the water is," Ralph answered without hesitation.

"Next question: where *is* the water?"

"Around the poles is the only place," Ben said. "We flew over all that country last time and mapped the ice fields. There's no water at all anywhere else."

Sanders looked away, across the deserts, beyond the horizons. He felt small and lost and old.

"Let's go," he said.

They left Ben Cooper with the spaceship, not entirely against his will. There was a strong two-way radio in the copter, and they all felt that it would only be sensible to hold one man in reserve.

The copter took off, a glittering bird under the morning sun.

The flight lasted three days. It was monotonous for the most part, an endless waste of silent sand, broken occasionally by low and rocky hills. They saw no animals from the air, and only a few cactus-like plants rooted in the shifting sands. There was one bad dust storm that boiled across the desert floor, but they got above it without difficulty.

There were no canals. There were not even streaks that might have resembled canals. The canals, Sanders thought, were like the Western Sea, the Northwest Passage, the Seven Cities of Cibola. Like all dreams, they were best seen from afar.

As they drew near the polar ice, even the days were bitterly cold. The sky was almost black and there were thin blue mists of ice crystals in the air. The desert sand below them became splotched with a dark, cold, swampy green. Thin hard snowdrifts were violet in the light of the frozen sun.

The copter landed near the edge of the polar ice on a narrow ridge of slick, mossy rock. The land closely resembled some parts of Earth, where you get above the timberline in cold mountain air, and water from glacial lakes trickles down across the grey wet rocks.

They got out. They heard the frozen silence and that was all.

Sanders looked around slowly, feeling the cold eat through his clothing and chill his feet. There was a lake of white-violet ice to his left, like glass in the snow and the rocks. He stared at it for a long time.

"Ralph, have we got any line in the copter?" he said into his suit mike. It seemed odd not to see his frozen breath before him. "Anything we could use for a hook?"

"We might be able to rig up something."

They found some wire and torched a hook out of a spare copter ring. Sanders walked over to the lake, his feet coming down uncertainly on the light, crisp surfaces. He took the torch and carved out a small, neat circle in the ice.

There was deep black water beneath the ice.

He put a chunk of canned meat on the hook and lowered it into the hole.

"Here goes nothing," he said.

They waited, stirring the water occasionally to keep the ice from forming. They got good and cold. The silence was absolute. An hour passed. Another hour.

Something hit the hook. The wire jerked Sanders' gloved hand and he would have lost it if it had not been wound around his wrist.

The wire cut through the black water with a *ssss*.

"Can you hold him?" Ralph whispered.

"I think so."

It was strong and heavy and full of fight. Sanders played it tautly, feeling it jerk against his wrist. He was sure he had it hooked. He began pulling the wire in, a loop at a time. His heart hammered in his chest and he was short of breath. If he could keep it from darting under the ice, snagging the line—

He saw him: a flash of gold in the cold black water.

He pulled, not too fast.

It flopped out on the ice and both men dived for him.

They held him as he squirmed under their gloves. They laughed and hollered unreasonably. They had him! They ran the wire through his gills and held him up, still wriggling heavily.

He was a beauty: a slim firm five-pounder, sleek and solid gold with jet black fins. He looked more like a golden mountain trout than anything else, and he was the most beautiful fish Sanders had ever seen.

"Get him in the water. We don't want to kill him."

They lowered him into the icy water on the stringer and then anchored the line to a stub of mossy rock. They looked at each other, grinning happily.

"There's a food supply here," Sanders said.

"Look!"

He followed Ralph's pointing finger and saw a small black shape on the ice. It slithered away as he watched, moving toward the

swampy country beyond. It looked like a cross between an otter and a seal.

"This is where the life is, Ralph. This is where he's got to be."

The emptiness and the silence closed in around them, but the wire into the water was taut and moved as they watched, back and forth across the hole in the ice.

Three days later, they found him. He was not three hundred yards from the copter.

He stood quietly on the violet ice, watching them.

He could not have been mistaken for a human being of the type that they had known. But he was a man, and could have been nothing less.

"Don't scare him."

The man was not frightened. He was small, only slightly over four feet tall, and warmly dressed in black skins. He held a spear balanced in his right hand, and Sanders could see that he had an atlatl to throw it with. His face was very white with a high flush of red around the nose and on both cheeks. His eyes were narrow and there was no hair on his face. He wore a skin hood that covered his head, neck, and ears.

He neither advanced nor gave ground.

He never saw an Earthman before, Sanders thought. He hasn't learned to be afraid.

"Get the fish," Sanders said.

Ralph hauled up the golden fish and handed it to Sanders. "Let me go first," Sanders said. "He won't worry so much about just one of us."

He took the fish and held it in his hand where the man could see it. He walked towards him, slowly.

The man stood his ground.

Sanders got close enough to touch him. He noticed that his eyes were brown. He held out the fish with his right hand. With his left hand he pointed first to the fish and then to the man. He smiled.

The man took the fish, sniffed it, and broke its neck with one quick jerk. He put the fish in a pouch he carried around his waist. He smiled back, showing white even teeth. He put his spear down on the ice and pushed back his hood. He took a bone comb out of his straight black hair and handed it to Sanders.

Sanders took it. He pointed to himself. "Sanders," he said slowly. "San-ders."

The man caught on instantly. "Narn," he said, pointing to himself. His voice, picked up by Sanders' suit phones, was high and musical. He said nothing else.



Sanders led him over to Ralph. He introduced them and the man repeated Ralph's name. Then he repeated Sanders' name and pointed to Sanders. He smiled, happily.

The three men stood on the ice, completely stumped by the frustrating wall of language.

He has a language, Sanders thought. Certainly, he doesn't live alone, because he is a man. His people must hunt and fish and gather what plants there are here. No agriculture, no cities, no nothing. This land won't support more than a handful. How many? Fifty? Sixty? A hundred? They never had much of a chance on this world. What happens to them now? What happens to them now—after they've met the men from Earth?

There was no wind, there was only the cold. Desolation was all round them.

The man in the black skins looked at the shining copter curiously. "Narn," he said again, and pointed.

Sanders turned to Ralph. "Guess he wonders what it is," he said. Ralph pointed to himself, and then to the copter. He pointed into the dark sky and moved his finger in an arc to the ground.

Instantly, Narn grew agitated. He tried to talk, rapidly, and then abandoned the attempt. He pointed at the copter, and then into the air. His eyes were bright and excited.

"He thinks we came from the sky in the copter," Ralph said. "Didn't we?"

Narn pointed again at the copter and tugged Sanders' arm.

"He wants to see it up close, Ralph."

"Okay by me."

Narn hurried across the ice, easily, without effort. Sanders and Ralph couldn't keep up with him. When they reached the copter, Narn was already patting its sides and trying to lift it off the ground.

"Boy," Sanders said, shivering in the cold, "we don't awe this guy any."

"Does he really want to go up?"

Narn settled that question. He pointed insistently up into the clear air. He grinned from ear to ear.

"Roll all the windows down," Sanders said. "We'll keep our suits on."

He helped the man into the copter and strapped him in a seat. Narn was not happy about the strap, but seemed to trust them. He looked around eagerly.

Ralph took the copter up five hundred feet and then loafed along over the rocks and ice and the wet green mosses. Narn stared from the copter to the ground and back again. He did not try to speak. He watched Ralph intently. The look in his eyes was almost religious in its intensity.

Sanders stayed at his side.

They had been in the air ten minutes when Narn spoke. "San-ders." Sanders turned and smiled.

Narn pointed at himself, and then at the copter controls.

"This," Ralph said slowly, "is about where I get out."

"San-ders."

Sanders leaned forward. "How do you *know* he can't?"

"He's never even *seen* a copter before."

"San-ders. San-ders."

Sanders looked at Narn and wondered. "He's about the last of his kind, Ralph," he said finally. "He's lived on a world that's tough

beyond belief, lived there maybe for millions of years. He's used what there was, gone as far as he could in a hopeless ecological situation. He's survived."

"Sure, sure. I'm all for him. Adaptability. High intelligence. But no man can go from a spear-thrower to a copter in ten minutes."

"He's a different kind of man, Ralph."

Ralph shrugged. "It's your life. You get up here with him."

Sanders unbuckled the strap that held Narn to his seat. He led him to the controls of the hovering copter, squeezing past the white-faced Ralph Charteris. Narn sat down, cautiously. Sanders stood just behind him.

The man seemed absurdly small in the pilot's seat. He looked at Sanders. Sanders nodded, smiled, and crossed his fingers.

Very slowly, duplicating the motions he had seen Ralph make, the man moved the wheel and strained to reach the floor pedal. The copter lurched and lost altitude. Sanders started to reach for the controls, but Narn did not panic. Carefully, exactly, he compensated for the fall. The copter straightened. Sanders stumbled back and sat down.

"Well, I'll be damned," Ralph said.

The man piloted the ship for fifteen minutes, across violet fields of ice, flying steadily through the air. An icy wind blew through the ship, but Sanders hardly noticed it. He was completely stunned.

Narn, too, had found an artifact.

He took the ship back to almost exactly the position it had held when he had taken over the controls. He was tense and there was sweat on his face. It was terribly hot for him in the copter, even with all the windows open.

He let Sanders land the copter. Narn hurried to get outside and sat down on the ice, resting. After a few minutes, he got up and embraced each of the men in turn.

"Narn," he said proudly. "Narn."

The man in the black skins pointed across the ice and beckoned.

"He wants us to go with him," Sanders said.

Ralph was still trying to get his thoughts straightened out. "I don't know," he said. "One of us will have to stay with the ship."

Sanders nodded. "I want to go, Ralph. I'll take the pocket radio and throw out a beam so you can track me. Will you give me twenty-four hours, and then come and get me?"

Ralph hesitated. "Okay, Sandy," he said finally. "You watch yourself. These boys are nothing to fool around with."

Sanders smiled at Narn. "We'll get along," he said.

They shook hands, and Sanders set off with Narn across the violet ice. The bitter cold ate into him, turning his bones to ice.

They went a long, long way, across the cold and the rocks and the silences. Sanders felt his age, and it was hard for him to keep up. He damned his inability to talk.

He had never seen such loneliness.

Here, Sanders thought, here before me is the ultimate in isolated cultures. Here is a culture that has had to figure it all out for itself, with no help from anywhere. Here is a man who flew a copter the first time he saw one. Here is a simple man that some would call a savage. What might he become—now? How far might we go, together?

It took them three hours. Sanders was sore and his feet were numb with cold before they came to a valley of ice and rocks. The excitement of what he saw revived him a little.

The valley was pocked with caves: black holes against the faded light of the faraway sun.

They picked their way up a smoothly inclined path and paused before a cave entrance. Sanders couldn't see a thing, but Narn took him by the arm and led him inside.

Some twenty paces beyond the outside hole they came to what could only be called a door. Narn pressed three places on it very carefully and it swung open. A soft green glow spilled through the opening and in its gentle light Sanders could see that the door was beautifully made of hides stretched over a bone frame.

They walked through semi-darkness now, their footsteps hollow in the vault of the rocks. Gradually, the greenish light shifted to a warm yellow. Sanders noticed that the source of the illumination was hidden in the cave roof over their heads: glowing rocks that seemed to be built into the cave itself. He guessed that the rocks were of natural origin, but their cunning arrangement betrayed the revising hand of man. He knew little enough about indirect lighting, but this was as efficient a system as he had ever seen.

They stepped down into a large, well-lighted room. A tiny fire—hardly large enough to roast a marshmallow comfortably—flickered in the centre, and around it sat a woman and a child. Smaller caves branched from the cavern and lost themselves in the rocks.

Sanders saw something that took his breath away. The child was holding a toy cart in his arms.

The cart had wheels on it.

God, he thought. A Stone Age culture lost in the ice, and a toy cart with wheels. It had to be a toy, of course—they have no domesticated animals to pull a real cart. Narn's people are so few, so isolated. All his inventions had to come from a handful of people, without help from outside. There was a brain in that skull . . .

He noticed a light sled, with bone runners, standing against a wall. After the wheeled cart, it came as something of an anticlimax—though it was certainly more useful in the polar ice and snow.

"San-ders," Narn said.

The woman took her child's hand and moved back, shyly. She stood by a basin of crystal-clear water, her eyes on the stranger. She said nothing.

Sanders stood still, uncertain what to do. He felt as though he had stepped backward in time a million years, back through an enchanted cave that wound through ageless rock, back through history to an age when man was only a whisper in the wind . . .

He felt his palms sweating inside his airtuit.

Narn shook his head. "Don't afraid," the man in the black, sewn skins said carefully. "Don't afraid, San-ders."

He's learning our language already! What have we found?

A hand touched his arm. He started, surprised back to reality. Narn's boy was smiling gravely, pulling at his sleeve.

Sanders walked slowly to the centre of the room, and sat down before the tiny fire. He saw that the fire was really a kind of lamp—a stone dish of fat with a wick in it. Narn's woman took her place opposite him. There was only friendliness in her eyes.

Somehow, something passed between them. A little of the loneliness that Sanders had always had with him melted and was gone.

The lamp-fire threw steady shadows on the cave walls. Narn sat down by his side.

Sanders was suddenly very aware of his exhaustion, but he couldn't relax. His body ached with cold and fatigue, and his mind was so saturated with emotion that he felt a certain blankness. He was vaguely hungry, but he could not eat in his suit. He was tired, with dark circles under his eyes, but he was not sleepy. He felt curiously at home.

He sat there, smiling, and he was glad that words were not necessary. Finally, he stretched out by the tiny fire, looked at Narn, and closed his eyes.

Sleep was a long time coming, and when it came it was nothing to write home about. Solid rock is not the ultimate in mattresses, and he was keyed up to a point where he could not relax. He dozed fitfully, and his own spasmodic snores woke him up twice. His stiff, aching body did the trick the third time, and after that he knew that he had had all the sleep he was going to get.

He lay still, trying to keep his thoughts from bouncing back and forth between scrambled eggs and gargantuan steaks. He listened to the silence.

"San-ders?"

He looked up. Narn was squatting by his side.

"I'm awake," Sanders said, not knowing whether or not he would be understood. "You have insomnia too?"

Narn frowned at the last question, evidently storing it away for future reference. He pointed to one of the caves that branched out from the central cavern. "Come?"

Sanders got up. His body was one large ache.

Narn led him across the floor of the room, and into a dark hole. The passage was narrow and poorly lighted at first, but it gradually broadened as they walked. Sanders felt a little better. He guessed that Narn was going to show him something—another family, perhaps, or even an underground river.

The cave opened up, abruptly, into a high cavern perhaps fifty yards in diameter. The light was astonishing—soft greens and yellows and pinks, washing down from glowing rocks set into the very roof of the chamber.

Narn stopped and pointed.

Sanders suddenly forgot his pains and his weariness. He held his breath so long that the blood pounded in his forehead before he remembered to breathe again. He said nothing, for what he saw was beyond words.

The walls were alive. A man smiled down on him, and he could see his even white teeth and the glint of humour in his brown eyes. A landscape of violet ice lost itself in frozen immensities. A golden fish twisted in dark water, rising to a lure. A yellow storm boiled across a bleak desert, and cold stars were serene and splendid in the heavy velvet of an arctic night.

It was beyond reality, beyond his wildest dreams.

Paintings, yes—but you had to remind yourself of that. There colours were vividly real, and enhanced by a masterly use of the light from the glowing rocks. The perspective was perfect, the style naturalistic.

That wasn't all. There were neat, geometrical marks in bands under the paintings. Writing, beyond a doubt, covering panel after panel—and there were more caverns beyond.

Written history, on the walls of a cave—going back how many hundreds of thousands of years?

There were other marks that looked suspiciously like mathematics, a series of triangles that almost had to be geometry.

Sanders sat down, right in the middle of the cavern. He was stunned, and more than that. The toy cart had been enough of a jolt, even after Narn had flown the copter. After all, toy carts had been found in

Mexico archeologically, and the main differences were in the relative sizes of the two populations, and in their respective degrees of isolation.

This was a different kettle of fish. This was almost a miracle.

There was an excellent naturalistic cave art in the Upper Paleolithic of Europe, but it was a far cry from the paintings in *this* cave. And the Cro-Magnon were millenia away from writing, to say nothing of mathematics. Sanders sat there, lost in the rush of his thoughts.

Even on Earth, you had to be careful when you reconstructed a culture solely from what survived of their technology. The name of the Australian kinship systems could never be forgotten; the Maya invented the concept of zero with a Neolithic economy. And here were a people blocked technologically by a hopeless environment, forced to channel their cultures along other lines . . .

A new kind of people.

"You like?" asked Narn.

He watched Sanders with pleasure sparkling in his eyes.

"I like," Sanders said fervently. "More?"

Narn smiled, and led the way into another cavern lost in the rock beneath the ice.

Sanders almost forgot about Ralph Charteris and the copter. When he and Narn walked back through the central cavern and out into the valley, they had only a few minutes to spare.

They stood in the long valley with the sky almost black above them. The cold was bitter and very still. A thin blue mist of ice crystals was motionless against the snow. A cold, hard world.

Sanders looked into Narn's eyes, and saw there a wordless hope. Sanders knew that hope.

When the copter came, a dot against the black sky, they both knew that one chapter had ended and that a new one had begun.

It was *their* copter now.

Side by side, they waited for it to land.

Far above them, shining through the pale disc of the sun, the stars burned in an ocean of loneliness.

Chad Oliver.

BOOK REVIEWS

When a writer of the calibre of Lance Sieveking turns his attention to science fiction one may confidently expect a high degree of literary and entertainment value. As Advisory Editor of a new series of "Modern Novels of Science and Imagination" he must therefore take partial blame for the first experiment which is not quite successful, and is fully responsible for the second near-miss in the series, which, with some enterprise and opportunism, he wrote himself.

I rightly call **A World Of Difference** by Robert Conquest (Ward Lock—10/6d) an experiment because the author is a well-known poet who has also been interested in the specialist science fiction field for many years as a hobby, and this book is his first attempt at writing a novel of any sort. The admixture of word-painting and authentic jargon of stereotyped magazine science fiction lies uneasily with the general philosophical content and verbosity of the four main characters, all of which tends to submerge the faint attempt at plot and narration in a welter of chatty views on practically every aspect of probable social and technical changes in our future. The complexity of background detail is at once ingenious and indigestible, in a brave attempt to convey a realism of a future age. Nevertheless its careful reading will be rewarding, both for the extremely interesting views of an erudite humanist and for the often convincing picture of a future society. I applaud Mr. Conquest for a sincere try at a superior s-f novel, and hope that his next book will be more readable.

On the other hand veteran and accomplished novelist Mr. Sieveking himself pulls off a cracking adventure novel in **A Private Volcano** (Ward Lock—10/6d) which has little science content worthy of mention and bases its plot on the discovery on a lonely Pacific island by two diverse characters of a new element, "volcanium," which transmutes base metals into gold. The potentialities of this and the effect on world affairs are conventionally explored, and the treatment is rather hearty and on youthful lines. However, Mr. Sieveking appears to enjoy himself in its telling, and so I trust will the many readers who are adverse to the prevalent pessimism in most modern extrapolations of the future.

Clifford D. Simak's **Time And Again** (Heinemann—12/6d) is a complex science fiction novel involving time-travel paradoxes, androids, and far-future tensions beloved of the s-f fan. The author manages to imbue the story with just a little of his able literary talent, but the result is nowhere near the standard of his Fantasy Award winning "City."

The late and great Abraham Merritt is well-known to fantasy enthusiasts for his many novels of the 1920's and '30's, some rated as "classics." His **Burn Witch Burn** (Neville Spearman—11/6d) has been interestingly resurrected and although no more than a supernatural thriller, this exciting story of the terrifying powers of the evil witch, Madame Mandilip the doll-maker, reads as well as it did twenty-four years ago in the pages of the American *Argosy Magazine*—a sure tribute to Merritt's talent. Incidentally, the dust jacket blurb errs in stating that this is the first publication in England. Methuen & Co. published at least two editions, the 1st in 1934, and you may also remember an excellent movie version retitled "The Devil Doll," with Hollywood's peculiar casting of Lionel Barrymore as Mme. Mandilip!

The contents of the **Year's Best Science Fiction Novels** (2nd Series) edited by Bleiler & Dikty (Grayson & Grayson—10/6d) offer as wide a variety of entertaining science fiction as could be wished for—as is customary from these able anthologists. Four of the five novelettes from the original American Novels collection for 1954 are reprinted here, leading off with "The Enormous Room" by H. L. Gold & Robert Krepps (from *Amazing Stories*), an effective and unusual story whose plot I will not reveal. K. F. Crossen's "Assignment to Aldebaran" (from *Thrilling Wonder Stories*) provides the smooth-other-world-adventures-with-a-chuckle for which he is renowned, introducing a most likeable and resourceful character by the improbable name of Laertes Kwang Solomon. Frank M. Robinson's powerful "The Oceans Are Wide" (from *Science Stories*) depicts the struggle for power among the last generation of star-ship colonists voyaging to a new planetary home. Good plotting and characterisation here, making the best story in the book. Rounding off is Murray Leinster's "The Sentimentalists" (from *Galaxy*) wherein a monstrous honeymoon couple from the other end of the galaxy interfere with the methods of an unscrupulous corporation operating a human colony on a planet of Cetis Gamma.

Followers of television's "What's My Line" were rewarded on at least one occasion by a spirited encounter between Gilbert Harding and a fluent, supremely confident, "extra-sensory perceptionist."

Considerable publicity was given to the prognosticative talents of this somewhat outré challenger, but I feel that most science fiction fans, well educated in the more imaginative aspects of psi faculties regretfully refused to recognize the advent of a New Era, and ruefully returned to their own improbable parapsychological plots of *Astounding* et al. But in his autobiographical **Clock Without Hands** (Sidgwick & Jackson—Psi Library—10/6d) Ronald Edwin seeks to justify his claims of being gifted with this "impossible" sensitivity. I will not be so foolish as to comment on the authenticity of his claims to clairvoyance from merely reading his book, but apart from an interesting expose of the workings of spiritualism and his own opportunist activities in this field, I could find little of value as a literary achievement in his personal life-story, despite an evident sincerity and sense of humour. Mr. Edwin would have to be an able combination of telepath—teleport—telekineticist to get me interested, I fear.

Finally there are two excellent bumper anthologies embracing a wide variety of science-fictional themes and treatments, reprinted from American sources (although our better English authors are represented). I have neither the space to detail their contents, nor the temerity to pick out any story for individual mention. There is not one poorly written story and indeed the majority are far above average. **The Galaxy Science Fiction Omnibus** edited by H. L. Gold (Grayson & Grayson—13/6d) contains 20 out of the 31 stories in the original American *Second Galaxy Reader of Stf.*, all typical of *Galaxy's* halcyon years of 1951-1953, and all superbly executed to be faulted only by individual taste.

William Sloane, who has gathered together **Stories For Tomorrow** (Eyre & Spottiswoode—18/-) is remembered for his own classic fantasies *To Walk the Night* and *The Edge of Running Water*, and with a comparable flair for selecting other writers' better efforts, shows considerably improved taste than editor Gold. Admittedly he was not hampered by confinement to one particular magazine (with stories already bearing his seal of approval) and by discriminate choosing throughout the field of recent year (inevitably there are some duplications of other anthologised material) has produced a volume which can be recommended as a basic item for any science-fiction reader's library, and for sampling by inquiring newcomers to the genre. Incidentally it is almost a complete version of the original American edition, containing 22 of the 29 stories therein.

Leslie Flood.

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